



NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

**HOW SHOULD PUBLIC ADMINISTRATION EDUCATION
CURRICULUM WITHIN INDIANA HIGHER EDUCATION
INSTITUTIONS EVOLVE TO REFLECT THE COMPLEX
HOMELAND SECURITY ISSUES FACED BY FUTURE
PUBLIC SECTOR EMPLOYEES?**

by

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March 2012

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ABSTRACT

The events of 9/11 impacted every community in this country. The effects of the attacks are still being felt today and have brought about many changes. Most of those changes were centered on the concept of homeland security. People and governments had to think differently and do business differently; our leaders had to change as well. The academic world has not been immune to these effects and changes. Soon after 9/11, specialty degree programs were developed in the homeland security field to arm our community leaders and other professionals with the skills and knowledge to deal with this new issue.

This thesis explores the need to expand current homeland security education efforts to the already existing programs of public administration within colleges and universities in Indiana. By using survey data collected from homeland security leaders, emergency managers, and college students, the most important topics in homeland security were identified and compared to already existing public administration courses in order to determine the extent to which these topics are being addressed in current public administration programs. Using policy option analysis, potential solutions are evaluated and recommendations made to these Indiana institutions.

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LIST OF ACRONYMS AND ABBREVIATIONS

CBRN	Chemical, Biological, Radiological, and Nuclear
CERT	Community Emergency Response Teams
CHDS	Center for Homeland Defense and Security
CI/KR	Critical Infrastructure/Key Resources
CSEPP	Chemical Stockpile Emergency Preparedness Program
CST	Civil Support Team
DHS	United States Department of Homeland Security
DMAT	Disaster Medical Assistance Team
DMORT	Disaster Mortuary
EMS	Emergency Medical Service
ESAR-VHP	Emergency System for Advance Registration of Volunteer Health Professionals
GIS	Geographic Information Systems
HLS	Homeland Security
HSAC	Homeland Security Advisory Council
IDHS	Indiana Department of Homeland Security
IFTS	Indiana Firefighter Training System
LMS	Learning Management System
MMRS	Metropolitan Medical Response Systems
MUTC	Muscatatuck Urban Training Center
NIMS	National Incident Management System
PA	Public Administration
PHES	Public Health Emergency Surveillance System

QHSR	Quadrennial Homeland Security Review
SEMA	State Emergency Management
SNS	Strategic National Stockpile
SPEA	School of Public and Environmental Affairs

I. INTRODUCTION

A. PROBLEM STATEMENT

Homeland security is an issue that directly impacts all levels of government and disciplines within those levels. Developing the next generation of educated government leaders who understand the responsibility to properly prepare all levels of government in homeland security can be key to making this country safer. As these potential government professionals take steps to prepare themselves to enter the workforce, they attend colleges and universities in the hopes of gaining the necessary and anticipated foundational knowledge to enable them to fulfill leadership roles. Many aspiring public leaders will receive their formal education in degree areas such as public administration/political science (PA).

In a report by the Homeland Security Advisory Council (HSAC) regarding the top ten challenges for the next Homeland Security Secretary, challenge number four is identified as “building a cadre of homeland security leadership through a unified national system of training and education” (Homeland Security Advisory Council [HSAC], 2008). The same report also states, “Over 200 colleges and universities are now providing degrees in homeland security and related fields.” The creation of homeland security degrees is a step in the right direction, but it is limiting in scope. According to the National Center for Education Statistics, 23,493 bachelor’s degrees were awarded to public administration and social services professionals in 2007–2008.

Dr. Inamete has written, “The academic discipline of management is excellently designed to provide cutting-edge and innovative research and publications on homeland security issues and subjects, and in offering courses on homeland security subjects and topics” (Inamete, 2006).¹

¹ Dr. Ufot B. Inamete is a professor of political science at Florida A&M University and has specialized in international relations, comparative politics, and American government. He is currently researching national security policy studies.

Colleges and universities with public administration programs strive to give their students a baseline understanding in areas such as economics, finance, management, marketing, and personnel management. However, the national environment is changing and so must the educational curriculum in the field of public administration. The challenge for colleges and universities that offer these degree programs is to determine the best ways to educate this next generation of government employees and leaders in homeland security. Colleges and universities must determine the appropriate homeland security topics that will best prepare their graduates for positions in which homeland security knowledge will likely be required. Some programs—such as public and environmental affairs at Indiana University—have not been addressing the issue of Homeland Security at all in their curriculum (Indiana University, 2008).

Indiana University has used the book *Managing the Public Sector*, 8th edition, by Grover Starling as the text for its “Introduction to Public Administration” course. The author of that text broadly defines public administration as “the process by which resources are marshaled and then used to cope with the problems facing a political community” (Starling, 2008). A less formal and more descriptive view of public administration comes from the University of Oklahoma:

Public administration is the study of public entities and their relationships with each other and with the larger world: how public sector organizations are organized and managed; how public policy structures the design of government programs that we rely upon; how our states, cities, and towns work with the federal government to realize their goals and plan for their futures; how our national government creates and changes public policy programs to respond to the needs and interests of our nation. (University of Oklahoma, 2010)

As stated above, public administration focuses on the study of how public policy is designed and structured. Public administration also focuses on how different levels of government work together. Within homeland security, all levels of government need to work together since collaboration can be key to meeting the difficult tasks that arise during a homeland security event. Collaboration must be accomplished horizontally, across the different sectors or departments at the same level of government, and vertically, from one level of government to another. If the country is to be successful at

homeland security, then we must look at all levels of government. The education that this next generation of managers and leaders receives needs to have exposure to the area of homeland security policy.

The National Preparedness Guidelines clearly indicate that state and local leaders play an essential role in homeland security, particularly when it comes to community preparedness (United States Department of Homeland Security [DHS], 2007). Key to preparedness is planning and education at all levels. “Plans are vertically and horizontally integrated with appropriate departments, agencies, and jurisdictions” (DHS, 2007, p. 6). This approach highlights the need for each level of government to understand its role in preparedness and homeland security in general and the need to educate future leaders in these topics.

The United States Department of Homeland Security (DHS) has recognized that it must play a leadership role in the education effort. The HSAC articulated this role as “lead[ing] an effort to align curricula, develop education standards, define the loose boundaries of the profession, and support the academic foundations of a homeland security education system” (HSAC, 2008, pp. 9–10). However, it has not set common standards for degrees in this field. For ten years homeland security education has been a specialized field of study. According to the Center for Homeland Defense and Security (CHDS), 296 different institutions are now offering degree or certificate programs in homeland security, emergency management, emergency preparedness, terrorism, or cybersecurity (Center for Homeland Defense and Security [CHDS], 2010). During the last ten years, these programs have continued to fine tune their programs and curricula.

One might also consider the need for change in other educational disciplines, such as public administration. Other disciplines have changed over the last few years, but perhaps the changes are too subtle or embedded into other already existing areas, leaving the curricula too rooted in the concepts of preexisting programs. Due to the needs expressed by the federal government and the unfortunate examples of 9/11, Hurricane Katrina, and the pandemic flu (H1N1), it is time to look at other disciplines like public administration to determine whether they are providing the necessary and appropriate education in the area of homeland security. Therefore, the problem that I examine in this

thesis is whether the introduction of homeland security education into the core curriculum of already existing public administration programs within Indiana would be beneficial, whether to students seeking future employment in various areas of government, to the governmental entities that will be hiring these future graduates, or to the citizens that benefit from a safer homeland.

B. RESEARCH QUESTION

How should the public administration education curriculum within Indiana higher education institutions evolve to reflect the complex homeland security issues faced by future public sector employees?

II. THE NEED FOR HOMELAND SECURITY EDUCATION IN THE FIELD OF PUBLIC ADMINISTRATION

A. HYPOTHESIS AND TENTATIVE SOLUTIONS

Educating our homeland security professionals is a key piece to ensuring that governments at all levels are prepared to protect our country and to respond to homeland security events. The questions of what form this education takes and who is responsible for providing it are still issues that need to be addressed. Standardizing homeland security education and understanding the audience for this education goes a long way toward helping to ensure that those professionals who have chosen a career in public service are adequately prepared for the tasks they will be asked to perform.

This is evident in many of the documents produced by the federal government that deal with homeland security, including the National Strategy for Homeland Security, the National Preparedness Guidelines, and the Top Ten Challenges Facing the Next Secretary of Homeland Security. In February 2010 the DHS issued the Quadrennial Report (QHSR), which advises—in the section titled “Maturing and Strengthening the Homeland Security Enterprise”—that we must ensure that government professionals at all levels get the appropriate education, and that academic institutions should take the necessary steps to develop good programs (DHS, 2010, p. 72). This point is also emphasized by the many different training and education programs sponsored by the Department of Homeland Security, including the Naval Postgraduate masters program (Center for Homeland Defense and Security, 2008) and the NIMS training program (Emergency Management Institute–NIMS, 2011) that educate many government employees each year.

Since public administration program graduates are potentially involved in homeland security issues, these programs should be evaluated to determine whether they include a homeland security curriculum. This evaluation could help determine whether future graduates of these programs are receiving the necessary education to work in fields that will likely have to address homeland security issues. If the future employees are not

receiving the appropriate education in colleges and universities, it will be the responsibility of the government agency to provide that education when they enter the work force.

According to the National Center for Education Statistics, in the 1997–98 school year, 20,408 bachelor’s degrees were awarded in the field of public administration. In the 2007–08 school year, 23,493 bachelor’s degrees were awarded in the field of public administration—a 15.1 percent increase (National Center for Education Statistics, 2011). The number of students seeking education in this field continues to grow.

The current education system should be relied upon to provide baseline homeland security education. According to statistical data collected and published by Indiana University for graduation years 2005–2006 through 2009–2010, between fifteen and twenty percent of graduates with bachelor degrees in public administration were employed in the public sector (Indiana University–Bloomington, 2011). Thus, students seeking higher education in the previously mentioned majors are taking deliberate steps to prepare for work in the public sector and therefore need a baseline understanding of homeland security.

Many homeland security programs at the undergraduate and graduate levels have been developed around the country. However, these programs are only preparing one segment of future government professionals. According to the Bureau of Labor Statistics, only 171,000 of the federal government’s total 1,909,000 employees are working directly in homeland security (U.S. Department of Labor, 2011). Addressing the topic of homeland security in public administration degree programs will provide an opportunity for wider and more complete coverage of the topic for our future leaders. Public administration students frequently do not realize that they will be thrust into homeland security roles. I will provide three examples from Indiana state government: both the current director of Planning and Assessments and the chief fiscal officer for the Indiana Department of Homeland Security have undergraduate degrees in public administration; additionally, an attorney assigned from the attorney general’s office to assist the Indiana Intelligence Fusion Center has an undergraduate degree in public administration. It is possible to determine the core topics that need to be covered by studying the already

developed homeland security curricula, surveys of homeland security professions, and future issues in the field of public administration, as determined by current public administration educators.

The need to keep our country safe and secure is important, and continued development of homeland security programs can play a role. It is important to achieve a common understanding of the needs of the target employers when designing a college curriculum. As in any major area of education, academic institutions strive to provide their students with the basic tools needed to perform the daily tasks in their field.

Thus, I hypothesize that undergraduate public administration education in Indiana is not as effective as it could be in educating future government employees. Moreover, the students of public administration undergraduate programs in Indiana are not best served by the current curriculum. Finally, the current curricula does not protect the nation's homeland security needs as well as it could. A tentative solution to more effectively meet the needs of government employers, better address the nation's homeland security needs, and better serve the students in public administration programs is to integrate homeland security education into the undergraduate curriculum.

B. SIGNIFICANCE OF RESEARCH

This thesis attempts to expose the gaps in the current Indiana undergraduate PA program curriculum in the area of homeland security. Current homeland security literature states that education and training is needed for all levels of government. The research conducted and documented in this thesis may provide Indiana colleges and universities with a blueprint of needed curriculum changes that will address current homeland security needs, allowing these colleges and universities to provide students with the most comprehensive education.

This research will focus on already established public administration programs within the state of Indiana. The results of the research can be duplicated and used by other public administration programs across the country.

C. METHOD

The introduction of homeland security education into the core curriculum of already existing public administration programs within Indiana will be examined by using comparative analysis and policy option analysis.

This thesis will examine the 2008 Minnowbrook conference for topics that are related to homeland security. At the Minnowbrook conference, fifty-six public administration educators gathered to discuss the future of the PA field. Although the information from the conference exists at a very conceptual level, it represents a roadmap of the future of public administration. By examining what these educators see as the future of PA and comparing this with survey data that has been collected regarding current Indiana PA programs, curriculum gaps and future needs can be identified.

The frame of reference for the comparisons in this thesis will be survey data collected from homeland security professionals, emergency managers, and homeland security students, who were asked to prioritize topics into one of eight ratings: very important, important, slightly important, neutral, slightly unimportant, unimportant, and very unimportant. These survey results will be compared to the current curriculum offered by public administration degree programs within Indiana, looking for topic duplication, topic similarity, and topic nonexistence. Not all topics that impact homeland security can be covered in a public administration program. Policy option analysis will be used to look at the different approaches that could be taken by these Indiana public administration programs to include identified homeland security topics in the curriculum. Three options will be considered: do nothing, HLS concentration, and mandatory and elective courses. Each option will be evaluated against three criteria, and a recommendation will be derived from this analysis.

D. THE SIGNIFICANCE OF HOMELAND SECURITY TO DIFFERENT LEVELS OF GOVERNMENT

The 2010 Quadrennial Report by the DHS has used the term “homeland security enterprise,” which is defined as:

The collective efforts and shared responsibilities of Federal, State, local, tribal, territorial, nongovernmental, and private-sector partners—as well as individuals, families, and communities—to maintain critical homeland security capabilities. It connotes a broad-based community with a common interest in the safety and well-being of America and American society. (DHS, 2010a)

In this thesis, I will examine the mission and role of homeland security from the viewpoint of the federal government and the state of Indiana. By looking at how different levels of government define homeland security, as well as how different levels view their role and the role of the other levels of government, the impact that homeland security plays on the day-to-day missions of all levels of government can be determined. This, in turn, reveals a guide by which to determine the need for homeland security education at different levels.

The 2010 Quadrennial report identifies the vision and missions of homeland security as follows:

The vision of homeland security is to ensure a homeland that is safe, secure, and resilient against terrorism and other hazards where American interests, aspirations, and way of life can thrive. As noted earlier, three key concepts form the foundation of our national homeland security strategy designed to achieve this vision: Security, Resilience, and Customs and Exchange. In turn, these key concepts drive broad areas of activity that the QHSR process defines as homeland security missions. These missions are enterprise-wide, and not limited to the Department of Homeland Security. These missions and their associated goals and objectives tell us in detail what it means to prevent, to protect, to respond, and to recover, as well as to build in security, to ensure resilience, and to facilitate customs and exchange. Hundreds of thousands of people from across the Federal Government, State, local, tribal, and territorial governments, the private sector, and other nongovernmental organizations are responsible for executing these missions. These are the people who regularly interact with the public, who are responsible for public safety and security, who own and operate our Nation’s critical infrastructures and services, who perform

research and develop technology, and who keep watch, prepare for, and respond to emerging threats and disasters. These homeland security professionals must have a clear sense of what it takes to achieve the overarching vision articulated above. (DHS, 2010a)



Figure 1. Core Missions (from DHS, 2010a)

All the core missions can have an effect at all levels of government, but let us examine those with have the biggest and most direct impact on all levels of government. Missions 2 and 3 are predominately issues of federal enforcement, although this responsibility is changing. Mission 2, securing and managing our borders, mainly affects those eighteen states that have borders with foreign countries or water borders. This does not mean that the other thirty-two states are not affected by border-related issues, but managing the borders is not a priority for those nonborder states. Thus, Mission 2 has a very low impact on the majority of state and local governments. Mission 3, enforcing and administering our immigration laws, is likewise not a high priority for most state and local governments. Except for 287(g),² most state and local governments do not have the

² Section 287(g) of the Immigration and Nationality Act (INA), 8 U.S.C. § 1357(g) (1996), as amended by the Homeland Security Act of 2002, Public Law 107–296.

authority or mission to enforce these laws (U.S. Immigration and Customs, 2011). An examination of the remaining missions will reveal how they affect all levels of government. Again, the Quadrennial Report outlines the mission of the homeland security enterprise as seen by DHS; the federal government plays a role in all missions. However, for the federal government to achieve all these missions, the help of state and local governments is required.

Mission 1, as represented in Figure 2, has two objectives that greatly impact state and local governments. Under the objectives in Goal 1.1 (understanding the threat), the acquisition, analysis, and sharing of intelligence and other information on threats is a process in which state and local government personnel will play a large part. This will require that state and local governments develop a capacity to understand threats, to communicate with public and private sectors, and to share with the federal government. It will also require that state and local governments develop the needed expertise to understand the information and intelligence that is passed to them from the federal government. With regard to the objective to deter and disrupt operations, given the sheer numbers of state and local public safety workers, it is far more likely that one of them will be in a position to achieve this goal. Thus, it is vital that state and local government personnel are educated in a manner that allows them to understand how to detect terrorist activity and report it.

The next goal—stopping the spread of violent extremism—is not a primary job of state and local officials. However, understanding this topic and helping to communicate to the local community leaders the signs that might indicate such activities can enhance the chances that this activity is identified and discovered. The final objective, that of engaging communities, is a mission in which state and local officials can also play a large role. Given the sheer number of communities in this country, all three levels of government will need to leverage resources to achieve this mission.

Goal 1.2 has been primarily within the purview of the federal government, but many state and large communities have begun to enhance their capabilities in this area. The federal government has assisted states in this area with the development of the Army National Guard CBRN (chemical, biological, radiological, and nuclear) program. The

Army National Guard has trained more than forty national guard civil support teams (CSTs) to provide rapidly deployable expertise and assistance to local first responders to deal with an attack by means of weapons of mass destruction. Each team consists of twenty-two fulltime Army and Air National Guardsmen trained to assess a suspected CBRN attack and to advise and assist local authorities.

Turning our attention to Goal 1.3, the first three objectives deal with critical infrastructure/key resources (CI/KR) issues. As previously stated, state and local officials will usually have a close relationship with CI/KR facilities within their jurisdiction. State and local officials provide the day-to-day support of these facilities, including fire and police protection. State and local officials are also closely involved in important infrastructure such as water and waste removal. The last objective in this mission is to protect government leaders, facilities, and special events. State and local law enforcement already have the responsibility to protect leaders and special events. But the preservation of continuity of government falls on all levels of government and all departments within each level. No one agency can perform this function alone. Education can improve the ability of all levels of government in the production and implementation of a workable continuity of government plans.

Mission 4—safeguarding and securing cyberspace—also has an impact on state and local communities (DHS, 2010a). Many of the day-to-day functions that are carried out by governments at all levels are done in cyberspace. Ensuring that these activities can be carried out and done safely and securely is something that all levels of government have already focused on.

Mission 5 will be examined with a focus on its impact on the different levels of government, but the primary focus of this examination will be on state and local governments.

Preventing Terrorism and Enhancing Security

Mission Goals and Objectives

Goal 1.1: Prevent Terrorist Attacks: Malicious actors are unable to conduct terrorist attacks within the United States.

Objectives

- **Understand the threat:** Acquire, analyze, and appropriately share intelligence and other information on current and emerging threats.
- **Deter and disrupt operations:** Deter, detect, and disrupt surveillance, rehearsals, and execution of operations by terrorists and other malicious actors.
- **Protect against terrorist capabilities:** Protect potential targets against the capabilities of terrorists, malicious actors, and their support networks to plan and conduct operations.
- **Stop the spread of violent extremism:** Prevent and deter violent extremism and radicalization that contributes to it.
- **Engage communities:** Increase community participation in efforts to deter terrorists and other malicious actors and mitigate radicalization toward violence.

Goal 1.2: Prevent the Unauthorized Acquisition or Use of Chemical, Biological, Radiological, and Nuclear Materials and Capabilities: Malicious actors, including terrorists, are unable to acquire or move dangerous chemical, biological, radiological, and nuclear materials or capabilities within the United States.

Objectives

- **Anticipate emerging threats:** Identify and understand potentially dangerous actors, technologies, and materials.
- **Control access to CBRN:** Prevent terrorists and other malicious actors from gaining access to dangerous materials and technologies.
- **Control movement of CBRN:** Prevent the illicit movement of dangerous materials and/or technologies.
- **Protect against hostile use of CBRN:** Identify the presence of and effectively locate, disable, or prevent the hostile use of CBRN.

Goal 1.3: Manage Risks to Critical Infrastructure, Key Leadership, and Events: Key sectors actively work to reduce vulnerability to attack or disruption.

Objectives

- **Understand and prioritize risks to critical infrastructure:** Identify, attribute, and evaluate the most dangerous threats to critical infrastructure and those categories of critical infrastructure most at risk.
- **Protect critical infrastructure:** Prevent high-consequence events by securing critical infrastructure assets, systems, networks, or functions—including linkages through cyberspace—from attacks or disruption.
- **Make critical infrastructure resilient:** Enhance the ability of critical infrastructure systems, networks, and functions to withstand and rapidly recover from damage and disruption and adapt to changing conditions.
- **Protect government leaders, facilities, and special events.** Preserve continuity of government and ensure security at events of national significance.

Figure 2. Mission 1: Preventing and Enhancing Security (from DHS, 2010a)

Mission 5, as represented in Figure 3, has several goals and objectives that have an impact on state and local governments. Goal 5.1 has two objectives in which state and local authorities can play a critical role. The first objective of Goal 5.1 is to reduce the vulnerability of individuals and families. The states and, to an even greater degree, the local authorities have the best chance to achieve this goal since local governments have the closest and most direct connections to individuals and families. State and local authorities need to be educated about identifying hazards so that they are able to effectively communicate information to the citizenry about the vulnerabilities they face and how to protect themselves.

In addressing the second objective of Goal 5.1—mitigating risks to communities—state and local governments are responsible for the safety of these communities. Therefore, state and local authorities are responsible for a community's capability to withstand disasters. The need for local authorities to understand potential hazards and to overcome their damaging results will drive state and local authorities to learn to anticipate hazards.

The two objectives in Goal 5.2 also impact state and local officials. The objective of improving preparedness at all levels, including individual, family, and community, will involve state and local authorities. A well-educated professional will be better suited to drive community planning and preparedness at all levels. The need to build disaster capacity is clearly a state and local mission that requires professionals who can look to the future and plan accordingly. The second objective—strengthening capabilities with a focus on safety, law enforcement, information sharing, evacuation, shelter-in-place, public health, mass care, and public works—also implicates state and local issues.

Ensuring Resilience to Disasters

Mission Goals and Objectives

Goal 5.1: Mitigate Hazards: Strengthen capacity at all levels of society to withstand threats and hazards.

Objectives

- **Reduce the vulnerability of individuals and families:** Improve individual and family capacity to reduce vulnerabilities and withstand disasters.
- **Mitigate risks to communities:** Improve community capacity to withstand disasters by mitigating known and anticipated hazards.

Goal 5.2: Enhance Preparedness: Engage all levels and segments of society in improving preparedness.

Objectives

- **Improve individual, family, and community preparedness:** Ensure individual, family, and community planning, readiness, and capacity-building for disasters.
- **Strengthen capabilities:** Enhance and sustain nationwide disaster preparedness capabilities, to include life safety, law enforcement, information sharing, mass evacuation and shelter-in-place, public health, mass care, and public works.

Goal 5.3: Ensure Effective Emergency Response: Strengthen response capacity nationwide.

Objectives

- **Provide timely and accurate information to the public:** Establish and strengthen pathways for clear, reliable, and current emergency information, including effective use of new media.
- **Conduct effective disaster response operations:** Respond to disasters in an effective and unified manner.
- **Provide timely and appropriate disaster assistance:** Improve governmental, nongovernmental, and private-sector delivery of disaster assistance.

Goal 5.4: Rapidly Recover: Improve the Nation's ability to adapt and rapidly recover.

Objectives

- **Enhance recovery capabilities:** Establish and maintain nationwide capabilities for recovery from major disasters.
- **Ensure continuity of essential services and functions:** Improve capabilities of families, communities, private-sector organizations, and all levels of government to sustain essential services and functions.

Figure 3. Mission 5: Ensuring Resilience to Disasters (from DHS, 2010a)

Additionally, Goal 5.3—ensuring an effective emergency response—will have state and local impact. The first objective outlined in this goal deals with communication with local communities. State and local authorities will provide the best and fastest means

of communication to their communities. Moreover, the saying that “all disasters start locally” addresses the next objective, that is, to provide timely and appropriate disaster assistance. The federal government cannot be in all places in large numbers at once. Therefore, state and local officials will be the first to respond. Local officials need to understand how to handle such a response. The final objective requires that state and local authorities have the tools and education to provide timely and appropriate responses to disasters. The federal government, while robust in its capabilities, has shown that timely assistance after a disaster can be difficult. Therefore, state and local professionals must be prepared to provide timely assistance after a disaster.

The two objectives in Goal 5.4—rapid recovery—also have state and local impact. The need for state and local officials to understand the capabilities required for recovery from a major disaster is important if this goal is to be achieved. Not only is capability necessary for their own communities, but state and local leaders must have an understanding that their resources may be needed to assist other communities in time of disaster. Understanding the role of planning is vital to this mission. The last objective in this goal, that of ensuring a continuity of essential services and functions, will fall directly on state and local officials. They should understand what services have been impacted by a disaster and who is needed to resolve the problem.

The Quadrennial Report next addresses the need to mature and strengthen the homeland security enterprise (DHS, 2010a).

In examining Figure 4, we see that there are several objectives within this goal that have impact on state and local governments. The need to share information and analysis through the institutionalization of arrangements between different levels of government will also help in the objective to enhance the domain awareness of all levels of governments. The need for state and local officials to understand the world around them as it applies to issues of homeland security is vital if we are going to establish a situational awareness throughout the country. All levels of government have a shared responsibility to understand the threats that the country is facing daily and the security measures that are needed to respond to such threats. Some of this is being accomplished with the use of the fusion center network. However, if state and local authorities do not

understand the importance of this sharing and if they fail to continue to enhance the capabilities that exist, gaps will develop, leaving the country vulnerable to an attack.

The goal of building capable communities is aimed at ensuring that state and local communities have identified the core capabilities needed to guide homeland security activities through the use of training, exercises, and continuous evaluation of capabilities. Once the communities have achieved these levels of preparedness, they need to ensure that they have provided for the sustainability of these activities. Finally, state and local governments must strive to foster a unity of effort. Current community leaders need to develop a staffing plan that ensures that well-educated professionals are in place at all levels of governments. By creating a homeland security community of interest, the goals and objectives that have been outlined can be achieved. This will, in turn, foster greater understanding of homeland security and the function it plays in our daily lives.

The missions laid out by the Quadrennial Report affect many levels of government, and some are very complex. Effective emergency response and rapid recovery are just two examples of missions that will impact many levels of government. Having public professionals with an understanding of these homeland security issues and topics can enhance the effectiveness of the communities they serve. If public administration students receive education in these highlighted areas as part of their curriculum at Indiana universities and colleges, they should be better prepared to work in this complex environment.

Maturing and Strengthening the Homeland Security Enterprise

Goals and Objectives

Enhance Shared Awareness of Risks and Threats: Establish a comprehensive system for building and sharing awareness of risks and threats.

Objectives

- **Establish an approach to national-level homeland security risk assessments:** Develop and implement a methodology to conduct national-level homeland security risk assessments.
- **Share information and analysis:** Enhance critical tools and institutionalize arrangements for effective, timely sharing of information and analysis.
- **Screen and verify identity:** Establish a robust approach to identity verification that safeguards individual privacy and civil rights.
- **Enhance domain awareness:** Ensure shared situational awareness in the air, land, and maritime domains.
- **Integrate counterintelligence:** Use and integrate counterintelligence in all aspects of homeland security to thwart attacks against the homeland.
- **Establish a common security mindset:** Promote a common understanding of security and threat awareness as a shared responsibility.

Build Capable Communities: Foster communities that have information, capabilities, and resources to prevent threats, respond to disruptions, and ensure their own well-being.

Objectives

- **Set capability and capacity standards:** Identify core capability and capacity targets to guide homeland security investments and activities across the enterprise.
- **Enhance systems for training, exercising, and evaluating capabilities.**
- **Maintain and sustain equipment and capabilities:** Promote smart investment in operational capabilities.

Foster Unity of Effort: Foster a broad national culture of cooperation and mutual aid.

Objectives

- **Build a homeland security professional discipline:** Develop the homeland security community of interest at all levels of government as part of a cadre of national security professionals.
- **Promote regional response capacity:** Promote mutual aid agreements for response requirements that exceed local capacity.
- **Institutionalize homeland security planning:** Develop a planning system to execute homeland security activities.
- **Further enhance the military-homeland security relationship:** Strengthen unity of effort between military and civilian activities for homeland security.
- **Strengthen the ability of Federal departments and agencies to support homeland security missions**
- **Expand and extend governmental and private sector international partnerships:** Transform how government and the private sector interact.
- **Mature the Department of Homeland Security:** Improve DHS's organizational and programmatic alignment and its management systems and processes.

Foster Innovative Approaches and Solutions Through Leading-Edge Science and Technology: Ensure scientifically informed analysis and decisions are coupled to innovative and effective technological solutions.

Objectives

- **Scientifically study threats and vulnerabilities:** Pursue a rigorous scientific understanding of current and future threats to homeland security and the possible means to their prevention and mitigation.
- **Develop innovative approaches and effective solutions:** Encourage and enable innovative approaches to critical homeland security challenges, fostering collaborative efforts involving government, academia, and the private sector.

Figure 4. Maturing and Strengthening the Homeland Security Enterprise (from DHS, 2010a)

Indiana's Department of Homeland Security (IDHS) was established in 2005 and in a manner similar that by which the DHS was established. The IDHS is a combination of many state departments, including SEMA or the state emergency management department (Indiana Department of Homeland Security [IDHS], 2008). This is important to note because it explains why there IDHS contains a big emergency management role. IDHS is working to expand its roles, as exemplified by its definition of the homeland security field:

The disciplines of personnel involved in Indiana's homeland security field have expanded to include 37,000 firefighters, 12,000 law enforcement officers, 26,000 certified emergency medical service (EMS) personnel, 95 local emergency management/homeland security directors, 10,000 military personnel and approximately 142,000 health professionals, which include physicians, physicians assistants, dentists, dental hygienists, pharmacists, LPNs, RNs, certified nurse midwives, clinical nurse specialists, nurse practitioners, respiratory care practitioners, psychologists, clinical social workers, marriage and family therapists, mental health counselors, and social workers. Expanded partners in homeland security include public works officials, occupational safety and health professionals, mental health experts, volunteers, transportation officials, environmental and natural resources officials, animal and plant care and regulatory personnel, and faith-based personnel. The wide variety of endeavors, circumstances and lifestyles requires more refined policy and planning initiatives that integrate the needs of each discipline with the needs of the state in its entirety. (IDHS, 2008)

The manner in which Indiana has expressed its homeland security mission can be compared to that of the federal government. The state of Indiana, much like the federal government, has laid out its plan to secure Indiana and its people. The Indiana strategic plan has eight goals:

- Information sharing;
- Planning and risk analysis;
- Protection of CI/KR;
- Outreach and engagement;
- Training and exercise;

- Response;
- Health and medical; and
- Economic security. (IDHS, 2008).

These eight goals are not exactly the same as those identified by the Quadrennial Report, but the similarity is apparent.

1. Information Sharing Disciplines

The goal of information sharing involves enhancing coordination among the various homeland security partners. The number and type of partners involved in the homeland security field are evolving and expanding, and the opportunities to create synergy between those partnerships are equally numerous. Imagination in Indiana is abundant, and it can form the genesis of contemporary solutions to leading-edge problems (IDHS, 2008).

Specific initiatives include:

- Homeland security district planning councils;
- Indiana Counter-Terrorism and Security Council;
- Indiana Intelligence Fusion Center;
- State/local liaisons;
- Mutual aid; and
- Inter-state partnerships.

Goal 1 for Indiana is reflective of those objectives outlined in goals 1.1 and 5.2 in the Quadrennial Report. This goal emphasizes coordination among all levels of government and demonstrates the need for many levels of government to work together.

2. Planning and Risk Analysis

Planning and risk analysis includes developing requirements- and capabilities-based, statewide, comprehensive plans to address natural and man-made hazards. Indiana must be prepared for any type of natural or man-made event that might occur within or

near its borders. This preparation takes the form of plans created through a process involving stakeholders, verified through the training and exercise process, and then modified through the lessons learned after the exercises (IDHS, 2008).

Specific initiatives include:

- Emergency management/homeland security planning;
- Comprehensive statewide risk analysis;
- Common operating picture;
- Policies/procedures for interoperable communications (voice and data);
- Resource management;
- Capabilities assessments; and
- National Incident Management System (NIMS).

Likewise, Goal 2 has links to the Quadrennial Report. Goal 5.2 of the Quadrennial Report—strengthening capabilities—is in line with Indiana’s goal identified as capabilities assessments (DHS, 2010a).

3. Protection

The goal of protection concerns reducing the risk to Indiana’s critical infrastructure. Critical infrastructure and key resource (CI/KR) sites are those deemed most crucial in terms of public health and safety, governance, economic and national security, and public-confidence consequences. These sites can be potential terrorist targets and may also be at high risk for a natural hazard. Effective security involves plans that define, identify, and set priorities for the most critical structures and assets in the state of Indiana.

Such plans, risk assessment and risk reduction measurement tools, and private sector partnerships are part of Indiana’s critical infrastructure protection program. This program ensures that Indiana’s critical infrastructure is protected to the highest degree possible (IDHS, 2008).

Specific initiatives include:

- Critical infrastructure protection program;
- Geographic information systems (GIS);
- Cybersecurity;
- Chemical stockpile emergency preparedness program (CSEPP); and
- Leveraging the IDHS Fire and Building Safety Division's code enforcement officials.

Indiana's Goal 3 has links to the Quadrennial Report in several areas. Goal 1.3 deals with critical infrastructure and Mission 4 in the Quadrennial Report is dedicated to cybersecurity.

4. Outreach and Engagement

The goal of outreach and engagement revolves around the need to engage and educate the public and the media on homeland security issues. The public and the media play very large roles in the response to a disaster. Educating them on the anticipated actions of homeland security and on the actions that members of the public can take to protect themselves are key to efficient and productive disaster responses. Indiana should capitalize on and expand our excellent national reputation for crisis communication (IDHS, 2008).

Indiana recognizes that its citizens are the frontline eyes and ears for the prevention of terrorism; it emphasizes educating the public about what it can do to prevent and respond to disasters. Educating the media on how the federal, state, and local authorities will function after a disaster complements the efforts to educate citizens. Media coverage is an asset after a disaster, and government partnerships with the media can facilitate information sharing with the public when essential for saving lives (IDHS, 2008).

Specific initiatives include:

- Crisis communication planning;
- Family and citizen preparedness;
- Public information officer capabilities;

- Citizen corps program;
- Community emergency response teams (CERT); and
- Higher education consortium.

Goal 4 has a focus on the public and its preparedness, which is outlined in Goal 5.2—enhanced preparedness—and is also linked to Goal 1.1—engage communities—in the Quadrennial Report (DHS, 2010a).

5. Training and Exercise

The goal of training and exercise involves the establishment of world-class training and exercise facilities, curriculum, and networks. Indiana has demonstrated its nationally renowned training and exercise system with the Muscatatuck Urban Training Center (MUTC) and through exercises such as Ardent Sentry and Hoosier Sentry, one of the largest exercises ever conducted in the United States. Even with this expertise, Indiana possesses tremendous development capacity for a training and exercise system that will not only provide preeminence in our state but enhance the capabilities of first responders across the country and worldwide (IDHS, 2008).

Specific initiatives include:

- Muscatatuck Urban Training Center (MUTC);
- Indiana firefighter training system (IFTS)
- Learning management system (LMS);
- Emergency medical service (EMS) and hospital first-receiver disaster response training;
- First-responder training;
- County emergency management certifications;
- District exercises;
- Search and rescue;
- First-responder certification database;
- Code officials training; and
- Intelligence training.

Indiana's Goal 5 is to incorporate training aimed at preparedness and increased capabilities, which are also outlined in Goal 5.2 of the Quadrennial Report.

6. Response

Response involves the goal of promoting and optimizing the coordination of disaster responses. Indiana's comprehensive preparations will allow its first responders to respond to disasters within its borders and assist other states when disasters occur outside the borders of Indiana. Indiana has demonstrated this proficiency while responding to the 27 disasters declared within Indiana since 1990 and while conducting Operation Hoosier Relief in Mississippi during the response to Hurricane Katrina in 2005. The U.S. Department of Homeland Security has several initiatives that will be integrated into Indiana's response capabilities, including the National Incident Management System and the National Response Framework (Indiana Department of Homeland Security, 2008).

Specific initiatives include:

- District-based response teams;
- Statewide response teams;
- Emergency operations centers capabilities;
- Interoperable voice and data communications;
- Logistics capabilities;
- Statewide credentialing process; and
- Agricultural response capabilities.

Goal 6 is dedicated to the response function. In the Quadrennial Report, Goal 5.3—ensuring effective emergency response—looks at the same issues nationally (DHS, 2010a).

7. Health and Medical

The health and medical component of the goals involves the establishment of an effective disaster health and medical system. Indiana's abundance of resources in the health and emergency medical systems ideally positions it for key roles in disaster response. Indiana has focused on health care system recruitments as an economic

development tool, and this field is experiencing a return on that investment. Indiana's public health, emergency medical, and hospital communities have developed strong capabilities for disaster responses and have demonstrated their willingness to form partnerships and to expand Indiana's planning, training, and response capabilities (IDHS, 2008).

Specific initiatives include:

- Emergency medical service (EMS);
- District medical response teams;
- Disaster medical assistance team (DMAT);
- Disaster mortuary (DMORT) team;
- Mass casualty triage and tracking system;
- Hospital status tracking system;
- Public health emergency surveillance system (PHESS);
- Health volunteer registry (ESAR-VHP);
- Strategic national stockpile (SNS);
- Metropolitan medical response systems (MMRS);
- Digital health information transfer technologies;
- Special-needs planning; and
- Mental health system.

Goal 7 deals exclusively with the discipline of health and is part of the response plan, and can be linked to Goal 5.2 of the Quadrennial Report dealing with response.

8. Economic Security

The goal of economic security is promoted through partnerships and the development of homeland security innovations. As evidenced by the disasters in the Gulf Coast region caused by hurricanes in 2005, the supply chain for response and recovery operations is crucial. The flow of goods and services is the very lifeblood of the citizens and public-safety personnel who are affected by and respond to any major event.

Prevention of supply chain disruptions is a key component of response and recovery planning, and Indiana strives to integrate nontraditional partnerships wherever possible to enable the emergence of best practices (IDHS, 2008).

Specific initiatives include:

- Economic and disaster recovery guidance;
- Critical resource restoration;
- Strategic partnerships;
- Building plan review process; and
- Business continuity and disaster recovery planning (IDHS, 2008).

Indiana's Goal 8 deals with recovery issues and the importance of planning for recovery. The Quadrennial Report's Goal 5.4—rapid recovery—outlines the same issues (DHS, 2010a).

Different levels of government view homeland security in various ways, and the interaction among these various views is very complicated. The federal government takes a very wide view and incorporates the state and local governments into its plans. The National Preparedness Guidelines note that “plans are vertically and horizontally integrated with appropriate departments, agencies, and jurisdictions” (DHS, 2007). Indiana's strategy deals directly with interstate partnerships, mutual aid, and state and local liaisons. The state plan does not go into detail on the functions of the federal government but focuses instead on state and local relationships, preparedness response, and recovery.

As previously discussed, the federal government uses as a working definition of the homeland security enterprise the “collective efforts and shared responsibilities of Federal, State, local, tribal, territorial, nongovernmental, and private-sector partners—as well as individuals, families, and communities—to maintain critical homeland security capabilities” (DHS, 2010a). Indiana's strategic plan expands on that working definition through the creation of its eight main goals in the following areas: information sharing; planning and risk analysis; protection of CI/KR; outreach and engagement; training and exercise; response; health and medical; and economic security. Indiana's specific

initiatives aimed at meeting the eight main goals include the creation of homeland security district planning councils, an Indiana counter-terrorism and security council, the Indiana Intelligence Fusion Center, state and local liaisons, mutual aid, and interstate partnerships. As such, it appears that both the federal government and the state of Indiana recognize that effective homeland security efforts will require the combined resources of all levels of government and private-sector partners. Because those people attaining degrees in public administration in Indiana will likely be a part of these efforts in the future, it becomes relevant to discuss the current curriculum for PA students in Indiana, as well as to discuss the future of PA education.

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III. CURRENT CURRICULUM COMPARISON

A. INTRODUCTION

In order to educate future professionals in the field of public administration with the necessary skills to operate in the current day-to-day environment and to prepare them for the ever-changing future, it is important that curriculum reflect the current real-world environment, including a homeland security mission. However, because of the relatively young age of homeland security, there is no specific homeland security curriculum that is commonplace throughout colleges and universities, either nationwide or in Indiana, as will be analyzed and addressed in this chapter. The field of public administration requires a homeland security curriculum. In his thesis, Scott Winegar pinpointed this issue with the certainty that “the need to protect the homeland and respond to domestic disasters will not fade away. If indicators prove accurate, the demands on the homeland security profession will only increase over time” (Winegar, 2008). This chapter examines the existing curriculum in Indiana institutions in relation to PA baccalaureate-level programs and compares the existing curriculum to the needs of the homeland security curriculum addressed in Winegar’s thesis. Winegar examined trends in the homeland security undergraduate curriculum by compiling a list of homeland security curriculum topics and conducting a corresponding survey that will be explained further in Section C of this chapter. For this analysis, the results of Winegar’s survey will be compared to the existing Indiana PA curriculum to determine how the Indiana curriculum has incorporated homeland security topic areas and where improvements can be made. It is important to note that programs and courses above the undergraduate level, including graduate level and above, were not examined for the purposes of this analysis. This section focuses solely on undergraduate, baccalaureate-level PA programs.

B. EXISTING PROGRAMS

In Indiana, 37 colleges and universities offer areas of study in public administration, not including the online distance learning programs offered to state residents (U.S. College Search, 2011); however, none of these schools incorporates a

specific homeland security or intelligence focus at the undergraduate, baccalaureate level. An analysis of PA core curriculum, both mandated and elective options, will determine whether and which portions of the curriculum compare to a homeland security curriculum outlined by Winegar's thesis. (Winegar, 2008) The areas reviewed focus solely on undergraduate, baccalaureate-level courses offered at accredited Indiana colleges and universities in PA concentrations. Of the 37 Indiana colleges and universities with a PA discipline, 29 offer four-year programs at the baccalaureate level. The remaining eight school curricula were not analyzed because they did not meet the baccalaureate-level standard.

C. COMPARATIVE ANALYSIS

Winegar surveyed the following three groups to rank 30 HLS topics in order of importance: HLS professionals, emergency managers, and community college students. The HLS professionals group consisted of alumni of the Naval Postgraduate School's Center for Homeland Defense and Security. The emergency manager group consisted of middle-management members of the Oregon Managers Association. The community college student group was made up of Anne Arundel Community College and Laramie County Community College HLS students. The survey was compiled from the 30 HLS topic areas determined by Winegar and outlined in Table 1. The survey asked each of the respective groups to rank these areas as very important, important, slightly important, neutral, slightly unimportant, unimportant, or very unimportant (Winegar, 2008). The results of these surveys were compared to what is currently found in existing Indiana PA programs by focusing on course descriptions and course syllabi to determine how often each topic appears in existing Indiana baccalaureate-level PA courses.

The survey results for each of the groups surveyed are represented in Tables 2, 3, and 4. Table 5 represents the average survey results over all the groups surveyed. Survey results showing the percent that ranked the topic as very important or important were compared to the existing PA curriculum at 29 Indiana colleges and universities with baccalaureate-level programs in order to determine the frequency with which each topic appeared in the Indiana PA curriculum. Tables 2, 3, 4, and 5 display these results. For

purposes of this analysis, only the survey results for topics ranked as very important or important in homeland security curriculum are displayed. The rankings for slightly important, neutral, slightly unimportant, unimportant, and very unimportant were not examined for the purposes of this analysis.

Topic	
Before, during, after the attack	Interagency coordination
Civil/military relationship	Leadership
Civil rights/legal/ethics	Media, risk communication, and HLS
Comparative government	Private sector in HLS
Cybersecurity	Psychology of HLS
Decision making	Public health
Department of Homeland Security	Risk analysis
Emergency management	Role of communities
Engineering and HLS	Role of the individual in HLS
Exercise, training, and modeling	Sociology (politics)
Federal role in HLS	State and local role in HLS
Geospatial use in HLS	Strategic plan/budget
Homeland security	Technology for HLS
Human resources	Terrorism
Intelligence and HLS	Transportation and HLS

Table 1. Survey Evaluation Criteria Topics

Table 2 outlines the results of the comparative analysis between the results of the homeland security professionals' survey and the current Indiana curriculum.

Of the top 10 topics ranked as very important or important by these homeland security professionals, at least one Indiana institution offered at least one related course on the topic in five of the focus areas, namely in the following: terrorism, legal/ethical/civil rights, state and local government, interagency coordination, and civil/military relationships, which will be discussed further in this section. This comparison was based on the available course descriptions for the respective colleges and universities examined.

Topic	% Very Important or Important	#-% IN Programs
Terrorism	97	8-28
Legal, ethical, civil rights	93	3-10
State & local government	92	17-59
Interagency coordination	87	1-3
Federal role in HLS	85	0-0
Before, during, after attack	83	0-0
Civil/military relationship	79	1-3
Risk analysis	78	0-0
Emergency management	73	0-0
Psychology of HLS	73	0-0
Private sector role in HLS	72	0-0
Media	70	3-10
Leadership	69	0-0
Role of communities	68	1-3
Transportation security	68	0-0
Study of HLS	67	0-0
Intelligence	67	0-0
Comparative HLS	66	28-97
Public health	65	0-0
Sociology of HLS	64	3-10
Decision making	63	0-0
HLS technology	61	0-0
Strategic planning	59	3-10
Exercises and training	59	0-0
Role of individuals	56	0-0
Cybersecurity	54	0-0
Human resource mgmt.	37	0-0
Study of DHS	35	0-0
Engineering	29	0-0
Geospatial	27	0-0

Table 2. HLS Professionals Compared to IN Current Curriculum

Although homeland security professionals ranked the additional five categories in the 10 most important homeland security curriculum topics, no current Indiana institutions were found to have an existing curriculum in the PA field related to these topics: federal role in homeland security; before, during, after attack; risk analysis; emergency management; and psychology of homeland security. The remaining five correlations exist in topics not ranked in the top 10 for homeland security professionals as important or very important, namely the following: media, role of communities,

comparative homeland security, sociology of homeland security, and strategic planning. A list of course offerings by school is outlined in Appendix A (U.S. College Search, 2011). These courses were examined using course descriptions available through the institution that provide an overview and guideline for the topics covered in each course.

A comparison of the information reveals that although 97 percent of homeland security professionals rank terrorism as very important or important (Winegar, 2008), only eight (28 percent) of the Indiana colleges and universities offer a course in terrorism within their PA curriculum. However, it is important to note that the terrorism curricula examined for the purposes of this analysis very strongly correlate with the terrorism curriculum ranked in the survey. For example, instead of only briefly mentioning terrorism in introductory courses, institutions such as Ball State University, Indiana University–South Bend, and the University of Indianapolis offer semester-long courses that focus solely on terrorism. Ball State University’s “Politics of Terrorism” (Ball State University, 2011), Indiana University–South Bend’s “Terrorism and Political Violence” (Indiana University–South Bend, 2011), and the University of Indianapolis’s “Terrorism: Past, Present and Future” (University of Indianapolis, 2011) provide students with the opportunity to focus on terrorism issues throughout the entire duration of the course, providing them with a more in-depth examination of terrorism than an introductory course with many broad foci. Unlike some core curriculum courses examined and discussed throughout this chapter that correlate very little with the topics posed by the survey, the terrorism courses offered throughout Indiana institutions focus solely on terrorism for the length of the course and address terrorism at more than an introductory level. Therefore, it appears that, although there is the highest degree of agreement that the topic of terrorism is of great importance, it is not being taught consistently across Indiana in undergraduate programs.

Similar findings were made in three of the top ten comparisons. Ninety-three percent of the homeland security professionals ranked legal, ethical, and civil rights as very important or important; however, only three (10 percent) Indiana institutions offered any curriculum of this nature, but the course curricula that were offered appear to closely outline the topic material discussed, instead of only vaguely addressing the subject matter

(Winegar, 2008). The same is true for the subjects of interagency coordination and the civil/military relationship. These topics are ranked as very important or important by 87 percent and 79 percent of homeland security professionals respectively, and they appear in 1 (3 percent) of Indiana institutions; here the course curriculum closely mirrors the information presented in the survey study (Winegar, 2008).

A different result was found when comparing the subject of state and local government, which was ranked important or very important by 92 percent of homeland security professionals and found in 17 (59 percent) of Indiana curricula. Although many institutions offered courses examining the role of state and local government within the political system, at least on the introductory level, the focus of the courses displays an overall look at the role of state and local government within the political system, without addressing its role in homeland security alone. Thus, the course weakly correlates the curriculum with the topic in the survey (Winegar, 2008).

Table 3 compares the frequency at which the PA curriculum at the baccalaureate level in Indiana institutions matches the topic area to the percentage of the emergency managers surveyed who ranked those topics as very important or important. The results of the comparison reveal less of a correlation in the top 10 topics as when the same Indiana curriculum information was compared to homeland security professionals' top 10 items. Thus, the current Indiana curriculum touches on fewer of the topics ranked in the top 10 by the emergency managers than by the homeland security professionals.

Of the 10 topics ranked highest by emergency managers, at least one Indiana institution offered a course on the subject area in three of the topics, less than the number of matched top 10 topics of homeland security professionals. When studying the course descriptions and course syllabi, the following topics ranked in the top 10 by emergency managers were not found to have any current related curriculum in Indiana institutions under the PA baccalaureate-level programs: emergency management; before, during, after attack; exercise and training; private sector role in homeland security; public health; and risk analysis. The three topics that both rank in the top 10 for emergency managers as very important or important and are discussed in the current curriculum in at least one Indiana institution are the following: state and local government, interagency

coordination, and media, each of which will be analyzed further (Winegar, 2008). The remaining seven topics are addressed in Indiana curriculum and do not rank in the top ten as very important or important by emergency managers: terrorism, strategic planning, legal/ethical/civil rights, sociology of homeland security, civil/military relationship, and comparative homeland security (Winegar, 2008).

Topic	Very Important or Important %	#-% IN Programs
State & local government	93	17-59
Emergency management	93	0-0
Before, during, after attack	91	0-0
Exercises and training	90	0-0
Interagency coordination	88	1-3
Private sector role in HLS	86	0-0
Public health	81	0-0
Risk analysis	77	0-0
Media	76	3-10
Leadership	74	0-0
Decision making	72	0-0
Intelligence	72	0-0
Federal role in HLS	69	0-0
Terrorism	66	8-28
Role of communities	66	1-3
Strategic planning	65	3-10
Role of individuals	65	0-0
Cybersecurity	63	0-0
Transportation security	63	0-0
Legal, ethical, civil rights	60	3-10
HLS technology	58	0-0
Sociology of HLS	56	3-10
Civil/military relationship	56	1-3
Human resource mgmt.	49	0-0
Comparative HLS	47	28-97
Engineering	42	0-0
Study of HLS	42	0-0
Geospatial	37	0-0
Psychology of HLS	33	0-0
Study of DHS	23	0-0

Table 3. Emergency Managers Compared to Indiana Current Curriculum

According to the responses of the emergency managers, state and local government was tied at the highest rank, with 93 percent of emergency managers believing it is very important or important to a homeland security curriculum. As stated previously, 17 (59 percent) of Indiana colleges or university curricula address the topic of state and local government but in a more generic form than the focus of the survey study (Winegar, 2008). Many of the courses are introductory courses and focus on the role of state and local government in the political system as a whole, not specifically on their homeland security role.

Interagency coordination and media was also ranked in the top 10 as very important or important by emergency managers, at 88 percent and 76 percent respectively. The subject of interagency coordination is only addressed at one (3 percent) Indiana institution, and the course touches on the topic by focusing on the ways in which various government political systems work together and cooperate at the national, state, and local levels; there is no specific homeland security focus. A similar result was found with regard to the media curriculum. Although addressed at 3 (10 percent) of Indiana institutions, the courses appear to focus on the role of the media and their impact on the political system as whole, without any specific homeland security focus.

Table 4 illustrates the results determined by the community college students who were surveyed compared to the current Indiana curriculum. By examining course descriptions and course syllabi to determine the frequency of each topic in the existing Indiana curriculum, the following results were found. Of the 10 topics ranked most frequently as very important or important by community college students (Winegar, 2008), the current Indiana curriculum addressed the following six topic areas: terrorism, state and local government, legal/ethical/civil rights, sociology of homeland security, civil/military relationship, and interagency coordination. The remaining four of the top 10 topics ranked by community college students were not addressed by any current core curriculum in the Indiana current curriculum for PA baccalaureate-level courses. Those topics are risk analysis; before, during, after attack; study of homeland security; and public health. Likewise, the current Indiana curriculum addresses four additional topics from the survey that were not ranked in the top 10 by community college students,

namely media, role of communities, comparative homeland security, and strategic planning. It could be argued that Indiana is deficient in that it is missing some very important topics in the currently available curriculum, while it continues to include topics that may have lost their modern-day relevance.

Topic	% Very Important or Important	#-% IN Programs
Terrorism	100	8-28
State & local government	96	17-59
Risk analysis	93	0-0
Legal, ethical, civil rights	93	3-10
Before, during, after attack	90	0-0
Sociology of HLS	86	3-10
Civil/military relationship	86	1-3
Interagency coordination	86	1-3
Study of HLS	85	0-0
Public health	85	0-0
HLS technology	84	0-0
Emergency management	83	0-0
Cybersecurity	82	0-0
Transportation security	82	0-0
Media	82	3-10
Role of communities	82	1-3
Leadership	79	0-0
Federal role in HLS	78	0-0
Private role in HLS	78	0-0
Decision making	75	0-0
Intelligence	75	0-0
Exercise, modeling, training	75	0-0
Role of individuals	75	0-0
Comparative HLS	71	28-97
Engineering	71	0-0
Geospatial	67	0-0
Human resource mgmt.	67	0-0
Strategic planning	65	3-10
Psychology of HLS	65	0-0
Study of DHS	64	0-0

Table 4. Community Colleges Students Compared to Indiana Current Curriculum

Similar to the survey results for homeland security professionals, terrorism was ranked the highest in importance by community college students. A noted difference between the two groups is that 100 percent of community college students ranked terrorism as either very important or important (Winegar, 2008). However, only eight (28 percent) Indiana institutions offer specific terrorism courses in their current public administration programs. As previously addressed, the terrorism courses appear to be a direct relation to the terrorism topic mentioned by Winegar, proving that, although not even a third of Indiana institutions offer the courses, the topic is the main focus of the entire semester. The second highest-ranked topic by community college students is state and local government, a topic addressed at least at an introductory level by seventeen (59 percent) of the Indiana colleges and universities examined. Of the students who completed the survey, 96 percent ranked state and local government as very important or important. However, many of those courses appear to address the general role of state and local government in the overall political system, without a specific course-long focus on homeland security.

The topics of legal/ethical/civil rights and sociology of homeland security were ranked as very important or important by 93 percent and 86 percent of community college students respectively. However courses addressing these topics are found at the undergraduate level in only three (10 percent) Indiana institutions (Winegar, 2008). Similar to state and local government courses, these courses focus on the sociology and rights of individuals in the system as whole, without a specific homeland security focus throughout the duration of the course. Likewise, the subjects of civil/military relationship and interagency coordination were ranked as very important or important by 86 percent of community college students, but courses that addressed this topic were found in only one (3 percent) Indiana institution. Moreover, the focus there is on the military's role and the interagency coordination throughout the entire political system, without a specific homeland security focus.

A comparison of results determined by all persons surveyed compared to Indiana current curriculum is illustrated in Table 5.

Topic	% Very Important or Important	#-% IN Programs
State & local government	94	17-59
Terrorism	87	8-28
Before, during, after attack	87	0-0
Interagency coordination	87	1-3
Legal, ethical, civil rights	83	3-10
Emergency management	81	0-0
Risk analysis	80	0-0
Federal role in HLS	80	0-0
Media	75	3-10
Private sector role in HLS	74	0-0
Public health	74	0-0
Civil/military relationship	73	1-3
Leadership	72	0-0
Exercise, modeling, Training	71	0-0
Intelligence	70	0-0
HLS technology	69	0-0
Transportation security	69	0-0
Role of communities	69	1-3
Decision making	68	0-0
Sociology of HLS	65	3-10
Study of HLS	63	0-0
Cybersecurity	62	0-0
Strategic planning	62	3-10
Role of individuals	62	0-0
Comparative HLS	61	28-97
Psychology of HLS	59	0-0
Human resource mgmt.	46	0-0
Engineering	41	0-0
Study of DHS	37	0-0
Geospatial	37	0-0

Table 5. All Persons Surveyed Compared to Indiana Current Curriculum

Five of the top ten overall highest ranked topics are addressed in the current Indiana curriculum, specifically state and local government, terrorism, interagency coordination, legal/ethical/civil rights, and the federal role in homeland security (Winegar, 2008). The remaining five of the top 10 highest-ranked topics were not addressed in the current Indiana curriculum: before/during/after attack, emergency management, risk analysis, media, and the private sector role in homeland security. Six topics are addressed by the current Indiana curriculum that did not rank in the top 10 by all persons surveyed, namely the following: civil/military relationship, the role of communities, sociology of homeland security, strategic planning, and comparative homeland security. Ranked by 94 percent of all persons surveyed, state and local government is the highest-ranked overall topic, with terrorism and interagency coordination both receiving the second-highest ranking for very important or important, at 87 percent. State and local government courses are found in seventeen (59 percent) Indiana institutions, with terrorism-related courses offered in eight (28 percent) Indiana institutions and interagency coordination offered in only one (3 percent) Indiana college or university. The subjects of legal/ethical/civil rights and media were considered very important and important by 83 percent and 75 percent, respectively, of all persons surveyed and are only addressed in three (10 percent) Indiana institutions.

D. WHAT DOES THIS ANALYSIS MEAN

Winegar's survey results of homeland security professionals, emergency managers, and community college students determined how many individuals of each group ranked the topics listed as vital to the homeland security curriculum in question. These results were then compared to the frequency of each topic in the current curriculum of Indiana PA courses at the baccalaureate level. This comparison was done by gathering course description data for each of the 29 colleges and universities in Indiana with baccalaureate-level PA programs and applying the data on a representative scale. The results of this analysis reveal that, although some of the topics compiled by the survey currently exist in the examined Indiana institutions, other topics such as risk analysis; before, during and after attack; study of HLS; emergency management; and the federal role in HSL are never addressed at all. Thus, topics considered very important or

important by those surveyed for homeland security curriculum, are not currently addressed in Indiana institutions. Terrorism is a topic ranked by a large percentage of the surveyed groups as very important or important. However, based on the analysis used, not all Indiana institutions address this topic. Thus, one may conclude that the importance of the topic does not necessarily reflect the frequency with which it will appear in the curricula of Indiana institutions. Given the growing field of homeland security, it is important to create programs that incorporate these topics into the classroom in order to educate future workers and leaders. Because not all Indiana curricula are addressing the homeland security topics that both homeland security professionals and students deem to be of the highest importance in the homeland security field, it appears that the education that public administration students are receiving may not be optimal or consistent. If homeland security professionals and homeland security students can identify baseline homeland security topics, then the educators in public administration should be able to develop a consistent set of homeland security topics drawn from the topics identified. Looking to the professionals in the field of homeland security, and working from the list of topics they deem to be most important, effective and highly relevant changes could be made to improve the PA curriculum in Indiana.

Along with course descriptions, course syllabi were examined for courses at three different Indiana universities. The course syllabi serve as a representative sample for all Indiana colleges and universities in this analysis. The course syllabi indicate that the courses do not directly reflect the homeland security topics presented by Winegar. Although the topics may be briefly discussed in the courses examined, based on the information located in the course descriptions and the syllabi, the courses themselves also focus on other issues not specific to homeland security. For example, the focus of one course for the entire semester is civil liberties and civil rights. However, the syllabus indicates that, of the seven topics covered in the course, civil liberties and civil rights in relation to homeland security is only covered in one of these topics. Thus, although the information is present in the course, it is only a brief part of the entire course. Likewise, the syllabus for a course entitled “Introduction to Political Science” from another university, reveals that the homeland security topic of terrorism is listed as a class

discussion question—but for only one day of the entire semester. This demonstrates that the homeland security topic is present in the course curriculum, but it is not the sole focus of the course. A review of the syllabi indicates that Indiana institutions do not currently put much focus on homeland security issues in current public administration programs. Because of this, the current Indiana curriculum does not adequately meet the needs addressed by Winegar to educate future homeland security scholars based on existing course criteria. Thus, to adequately educate future homeland security scholars, it is important to expand on the existing curriculum or to create new curriculum with a homeland security focus.

E. THE EXISTING CURRICULUM

As we have seen, when comparing survey results to the existing Indiana curriculum based on the available course descriptions, a majority of the topics found in the current Indiana curriculum fall into the top 10 highest-ranked areas of importance by at least one of the three groups surveyed or in the overall results of all persons surveyed, but there is a lack of consistency among the core topics in the Indiana programs. However, three additional topics from the original set of 30 topics were ranked in the survey but failed to be ranked in the top 10 of any group surveyed or in the overall results (Winegar, 2008). The following three topics were addressed in existing Indiana courses in at least one institution: comparative government, strategic planning, and the role of communities.

Comparative government courses were the highest match when comparing the 30 homeland security topics to the current PA curriculum at the baccalaureate level, with 28 (97 percent) Indiana institutions offering at least one course at the introductory level in comparative government, as outlined in Appendix A. However, the comparative government curriculum offered at Indiana institutions only weakly correlates to the comparative homeland security curriculum discussed (Winegar, 2008). A majority of Indiana institutions offers an introductory course in comparative government, generally comparing the political system of the United States to political systems throughout the world; however, the comparison is not focused solely on other homeland security systems

but instead examines political and national systems as a whole. Although this curriculum does exist in nearly all Indiana institutions studied, as discussed in other topic comparisons, the correlation between the course and the homeland security focus is weak. Although it is possible that homeland security is addressed, the comprehensive purpose of the class is an overall look at comparative government.

Another topic addressed in the existing curriculum is strategic planning, which appears in three (10 percent) Indiana institutions examined. As with comparative government, the strategic planning curriculum was not focused on the homeland security strategy specifically (Winegar, 2008). However, a few Indiana institutions do address the issue of strategic planning and budget at a general level for government programs, not specifically homeland security programs. A similar assessment is found with the topic of the role of communities, which is addressed in 1 (3 percent) institution that examines the community's role within the political system. Therefore, once again, it appears that Indiana is deficient in the education of its PA students, failing to effectively prepare them for their likely future roles, whether in the public or private sector.

Table 6 sets out the 30 topics studied in Winegar's survey at the frequency, from highest to lowest, with which they appear in the current Indiana curriculum.

Although many of the topics do appear in some of the current undergraduate PA curricula, a larger number of them are not presently discussed. Therefore, the Indiana PA program could be adjusted to include more homeland security-based topics or the development of homeland security-based programs, which could make all the programs more consistent, address the issues outlined in Minnowbrook III, and meet the criteria established by Winegar.

Topic	#-% IN Programs
Comparative HLS	28-97
State & local government	17-59
Terrorism	8-28
Legal, ethical, civil rights	3-10
Media	3-10
Sociology (politics)	3-10
Strategic planning	3-10
Civil/military relationship	1-3
Interagency	1-3
Role of communities	1-3
Cybersecurity	0-0
Decision making	0-0
Department of Homeland Security	0-0
Emergency management	0-0
Engineering and HLS	0-0
Exercise, training, and modeling	0-0
Federal role in HLS	0-0
Geospatial use in HLS	0-0
Homeland security	0-0
Human resources	0-0
Intelligence and HLS	0-0
Leadership	0-0
Private sector in HLS	0-0
Psychology of HLS	0-0
Public health	0-0
Risk analysis	0-0
Role of the individual in HLS	0-0
Technology for HLS	0-0
Transportation and HLS	0-0

Table 6. Topics in Existing Indiana Curriculum

F. CURRICULUM RECOMMENDATIONS

In addition to the survey developed and presented by Winegar to determine the 30 top homeland security topics ranked in order of importance, based on the opinions of homeland security professionals, emergency managers, and community college students, the survey also presents findings regarding the top recommendations for developing further homeland security curriculum (Winegar, 2008). As presented previously, terrorism is one of the top-ranked overall topics of importance based on all persons

surveyed and is considered one of the main components in a core curriculum, likely because terrorism is the main focus of homeland security (Winegar, 2008). Thus, courses in terrorism are imperative in a successful homeland security program. Although no Indiana institution has a specific terrorism program, it has been demonstrated previously that 8 (28 percent) Indiana institutions examined under the parameters of this study do include terrorism-specific, semester-long courses addressing the “how” and “why” behind terrorism. In this regard, future professionals are given a more in-depth look at terrorism, the politics behind terrorism, and its past, present, and future impact both nationally and internationally. The presence of specific terrorism courses at some Indiana colleges and universities demonstrates that the opportunity for creating similar curriculum also exists. The second-highest recommendation involves the “before, during, and after attack” cycle of emergency management (Winegar, 2008). Indiana colleges and universities examined for this program do not currently contain the curriculum necessary to satisfy this recommendation in public administration courses at the undergraduate level. The emergency management cycle is also significantly intertwined with the roles of emergency management and state and local government as core curriculum recommendations (Winegar, 2008). The current Indiana curriculum reveals that a majority of all examined schools present at least one course at the introductory level or higher that examines the role of state and local governments in the overall political system. Because the baseline curriculum already exists in most Indiana schools to examine the tiered effect of the inner workings of the political system, a similar course focusing solely on the tiered response with regard to homeland security issues appears to be relatively easily achievable in Indiana institutions.

Another of the top recommendations for core curriculum concerns the topic of legal and civil rights. This topic is a hot button and unsettled issue in the media (Winegar, 2008). The current curriculum examined in Indiana reveals that three (10 percent) colleges and universities falling within the parameters of this study provided a course in the legal and civil rights of individuals. However, because of the politically charged importance and sensitive nature of this topic, it is safe to assume that current and future members of the homeland security profession will be forced to form opinions and make

decisions necessary for the security of the homeland that also constitute a violation of the rights of certain subjects. Although a few Indiana institutions do offer courses addressing these issues in the political system, Indiana currently does not address this topic under all of its PA programs at the baccalaureate level.

Another important recommendation is the benefit of intelligence gathering (Winegar, 2008). Intelligence plays an important role in homeland security, and the intelligence field offers a large number of careers in homeland security. Despite its relevance to homeland security, however, no current Indiana institution offers an intelligence program or courses within their PA programs at the undergraduate level. The need to understand what intelligence is and the role it can play in management and decision making can help leaders better utilize this tool. For example, there are 72 fusion centers in this country. Are state and local leaders using this tool, or is it only being used by law enforcement? I have worked in a fusion center for five years, and my personal experience is that most of the work product that fusion centers publish is used by law enforcement primarily and rarely used by other government agencies. If prospective employees understood intelligence, its use, and its benefits, then other government agencies outside law enforcement could benefit.

Of the five highest recommendations for core curriculum basics, Indiana institutions currently offer undergraduate baccalaureate-level courses in PA programs that mirror three of the five highest recommendations. However, as noted previously, many of these courses are general, and although they may address homeland security issues, most focus on the role in the entire political and national system, without a specific coursewide homeland security focus.

The criteria recommended by Winegar to improve existing homeland security programs can also apply to improving public administration programs or creating homeland security programs in Indiana. Although there is no standard curriculum for homeland security programs, mainly due to the recent inception of this discipline, these recommendations could be essential to developing across-the-board curriculum criteria, beginning with focusing the curriculum in the first instances on these recommendations. As demonstrated by the statistics presented above and based on the course descriptions

provided for the PA programs, Indiana currently does touch on a number of these recommendations. However, the goal should be a more consistent set of topics that are addressed by these Indiana programs. It is not feasible to think that all programs will be exactly identical. However, the development of some core topics offered by a majority of the programs is not unreasonable or out of reach.

G. COMPARISON OF CURRENT HOMELAND SECURITY PROGRAMS AND INDIANA PUBLIC ADMINISTRATION PROGRAMS

Winegar identified 42 colleges and universities with undergraduate baccalaureate-level courses in homeland security throughout the United States. Of those, 35 colleges and universities offer homeland security baccalaureate degrees (Winegar, 2008). When examining Indiana colleges and universities with PA courses, 37 total institutions were found; of those, 29 offered PA baccalaureate-level degrees. Of these 29, course titles and descriptions were examined to determine the subject matter and the topics discussed in these courses. Along with course descriptions, the syllabi for specific courses from three of the examined universities were also reviewed. Although colleges and universities with PA programs nationwide were not examined, the comparison with the number in Indiana alone reveals that there are vastly more PA programs in existence than homeland security programs.

Many of the homeland security programs identified were not developed until three to four years before the 2008 survey, proving that the homeland security discipline itself is still very young and not well established (Winegar, 2008). On the other hand, public administration programs exist in a number of institutions and are fairly well-established programs. Likewise, there are no set homeland security curricula, largely because of the young age of the program and the fact that it is still developing in many institutions. An examination of the PA programs at Indiana institutions reveals that the core mandated classes for all students are very similar to one another. However, the PA curriculum has a much broader focus than solely homeland security issues, with most courses providing a broad look at the entire political system, not only its effects on homeland security. Thus, although homeland security issues are addressed in PA programs, a focus on homeland security would require a change in curriculum and the

development of homeland security programs. With specific homeland security programs in place, students would have the opportunity to focus solely on the politics and issues facing homeland security, allowing them the chance to have more education in that specific field. According to the survey, terrorism is the most common course offered in homeland security programs; it is offered in a majority of the homeland security programs examined, and it is listed as the number one homeland security topic considered “very important or important” to two of the three separate control groups surveyed (Winegar, 2008). Although courses specific to terrorism are offered in eight of the Indiana PA programs that were examined, terrorism courses are not found as a mandated core curriculum course in all PA programs. The most common course in core curriculum PA programs involves comparative government, which is offered in 28 Indiana PA programs; again by means of an overview of the entire political system.

Many existing homeland security programs “grew from established programs in other disciplines [and] the popularity of certain subjects may not have the same implications as if the homeland security program was designed from scratch” (Winegar, 2008). Although the origins of the public administration programs were not examined for the purposes of this study, it is assumed that PA programs were designed as their own discipline or as a subset of political science; on the other hand, homeland security programs can be designed based on either emergency management programs, criminal justice programs, or public administration disciplines. Thus, the focus of homeland security programs is more specific, depending on the curriculum and development of the parent program, while existing PA programs tend to focus on the same core mandated courses and are similar to PA programs at other institutions.

Despite the differences between the existing homeland security curriculum and the existing PA curriculum in Indiana institutions, homeland security programs can be designed from existing PA programs. Homeland security programs evolved from other existing programs, including PA programs, leaving the opportunity for Indiana to expand on its current PA programs to include more homeland security-specific undergraduate baccalaureate-level programs. Some Indiana institutions already touch on terrorism, considered to be the most important topic in homeland security. Thus, the opportunity

exists to either expand on current Indiana PA programs, to include more homeland security specific curriculum, or to develop homeland security–specific programs based on existing PA programs.

H. INDIANA HOMELAND SECURITY PROGRAMS

Thus far, the focus has been on a review of the undergraduate curriculum to determine the need for improvement from the lack of homeland security curriculum in Indiana institutions. However, there are existing standalone homeland security programs in Indiana at the graduate level. When examining what topics could be advantageous for PA programs, an examination of the current Indiana homeland security programs, even at the graduate level, can help identify the necessary topics that could be taught at the undergraduate level in PA programs. Four Indiana colleges and universities offer homeland security programs, two offered at the graduate level and two at the postgraduate level. Table 7 identifies those Indiana colleges and universities that offer homeland security programs.

Indiana College/University	Degree Offered
Indiana University–Indianapolis	Graduate Certificate in Homeland Security/Emergency Management
Indiana University–Kokomo	Online Certificate in Homeland Security/Emergency Management
Purdue University–Main Campus	Homeland Security Master Level Area of Specialization
Vincennes University	Homeland Security and Public Safety

Table 7. Indiana Institutions with HLS Degrees

Indiana University–Indianapolis and Purdue University offer graduate-level homeland security degrees. Indiana University–Indianapolis offers a graduate certificate in homeland security and emergency management (Indiana University Purdue University Indianapolis, 2011a). Purdue University offers a homeland security master level area of specialization (Purdue University, n.d.). The other two Indiana institutions with a homeland security program offer it at the undergraduate level: Indiana University–

Kokomo (Indiana University–Kokomo, 2011) and Vincennes University (Vincennes University, 2011). The curriculum for each program is outlined in Appendix B. Course descriptions along with course syllabi from a few of the schools were further examined to determine the content of each course and were used as a representative sample. The current existing homeland security curriculum was compared to the 30 topics in Winegar’s survey (Winegar, 2008).

The survey originally polled homeland security professionals, community college students, and emergency managers. The results of those individual surveys were averaged to determine the “all persons surveyed” category (Winegar, 2008). For purposes of this section, the “all persons surveyed” result will be compared to current Indiana homeland security curricula. A comparison of the results determined by the “all persons surveyed” response to the Indiana homeland security curriculum is outlined in Table 8.

In the results of all persons surveyed, 94 percent of responding people suggest that state and local government is very important or important in homeland security programs. However, only 1 (25 percent) examined Indiana school offers a homeland security–based state and local government course. On the other hand, although only 63 percent of those surveyed suggest that the study of homeland security is very important or important, all four schools offering homeland security programs offered such courses. Likewise, all four Indiana institutions with homeland security programs offered the following courses: terrorism; before, during, after attack; and emergency management—all of which are topics ranked in the top 10 of importance in Winegar’s study.

Of the 30 homeland security topics examined, 13 of them are found in Indiana homeland security programs. Table 9 illustrates the homeland security topics ranked from highest to lowest as they appear in the Indiana curriculum.

Tables 8 and 9 illustrate that the Indiana homeland security curriculum is similar to the topics examined that the survey participants feel are very important or important. Nearly half the topics discussed are found in at least one of the four homeland security programs examined, proving that, although Indiana homeland security programs are few

and far between, those that do exist are comprehensive in their topics. However, there is room for development and growth to ensure that all the topics presented are found in the curriculum.

Topic	% Very Important or Important	#-% IN Programs
State & local government	94	1-25
Terrorism	87	4-100
Before, during, after attack	87	4-100
Interagency coordination	87	0-0
Legal, ethical, civil rights	83	2-50
Emergency management	81	4-100
Risk analysis	80	2-50
Federal role in HLS	80	2-50
Media	75	0-0
Private sector role in HLS	74	2-50
Public health	74	2-50
Civil/military relationship	73	0-0
Leadership	72	1-25
Exercise, modeling, training	71	0-0
Intelligence	70	0-0
HLS technology	69	0-0
Transportation security	69	0-0
Role of communities	69	0-0
Decision making	68	1-25
Sociology of HLS	65	0-0
Study of HLS	63	4-100
Cybersecurity	62	0-0
Strategic planning	62	1-25
Role of individuals	62	0-0
Comparative HLS	61	0-0
Psychology of HLS	59	0-0
Human resource mgmt.	46	0-0
Engineering	41	0-0
Study of DHS	37	0-0
Geospatial	37	0-0

Table 8. All Persons Surveyed Compared to Indiana HLS Curriculum

Although the Indiana homeland security programs do not completely correlate to the survey results and not all of the topics presented are found in the existing curriculum, the four colleges or universities with homeland security programs represent excellent

baselines by which to develop future programs in Indiana. These four institutions are already ahead of the game in developing homeland security programs, especially considering the newness of the program. For example, the Indiana University–Indianapolis program was not even developed until 2009 and already meets some of the base topic guidelines. Thus, Indiana colleges and universities that do not currently offer homeland security programs could design programs based on what currently exists in Indiana, considering the fact that some of this curriculum currently exists.

Topic	#-% IN Programs
Before, during, after attack	4-100
Emergency management	4-100
Study of HLS	4-100
Terrorism	4-100
Federal role in HLS	2-50
Legal, ethical, civil rights	2-50
Private sector role in HLS	2-50
Public health	2-50
Risk analysis	2-50
Decision making	1-25
Leadership	1-25
State & local government	1-25
Strategic planning	1-25
Civil/military relationship	0-0
Comparative HLS	0-0
Cybersecurity	0-0
Engineering	0-0
Exercise, modeling, training	0-0
Geospatial	0-0
HLS technology	0-0
Human resource mgmt.	0-0
Intelligence	0-0
Interagency coordination	0-0
Media	0-0
Psychology of HLS	0-0
Role of communities	0-0
Role of individuals	0-0
Sociology of HLS	0-0
Study of DHS	0-0
Transportation security	0-0

Table 9. Indiana HLS Curriculum Topics

Appendix B lists the course titles for each homeland security program outlined in Table 7.

I. CONCLUSION

Of the four Indiana graduate programs studied, all four offer the topics of before, during and after attack; emergency management; study of HLS; and terrorism. Half the institutions offer the following course topics: the federal role in HLS; legal, ethical, civil rights; the private sector role in HLS; public health; and risk analysis. If these Indiana programs feel that homeland security professionals need to be taught these topic areas at the graduate level, then it could be concluded that a survey course at the undergraduate level in PA programs might also help students acquire a valuable baseline understanding of homeland security.

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IV. THE MINNOWBROOK III CONFERENCE

A. INTRODUCTION

The Minnowbrook III conference, held in 2008, invited public administration scholars to a two-phase conference. The first phase consisted of a preconference workshop, and the second phase was a more traditional conference setting with a larger attendance. Minnowbrook, a conference center in the upstate New York Adirondack Mountains, is a tradition held by the Maxwell School, which started the event in the fall of 1968 by initiating a conference consisting of young PA scholars, all under the age of 35, during the controversial Vietnam War, a time of turmoil for the nation. The intention behind the conference was to discuss the future of public administration, while presenting the scholars with an opportunity to express their ideas and concerns about the discipline. The second Minnowbrook conference was held twenty years later in 1988 (O’Leary, 2010). In 2008, to celebrate the 40 years since the original Minnowbrook conference, Minnowbrook III was initiated with the same intentions as the original conference—to allow PA scholars to discuss and critique the discipline and prepare for its future. According to Rosemary O’Leary, the idea behind Minnowbrook III was “to assess how public administration, public management, and public service can better respond to the turbulence and critical problems of our times,” with a necessary focus on the fact that, unlike in the past, PA leaders are now faced with multiorganizational problems and concerns and are not restricted to single organizations (O’Leary, 2010). Minnowbrook III thrived with the same spirit behind the original Minnowbrook conference—“the desire for the field of Public Administration to make a positive difference in the world in a very concrete way” (O’Leary, 2010).

B. MINNOWBROOK III

On receiving an invitation to Minnowbrook III, the 56 scholars invited to Phase I were instructed to write a short critique of the discipline before the conference and then to develop an imaginary view of the field in 2018, considering the areas of research, teaching, and culture of the field (O’Leary, 2010). With regard to research, the members

of Phase I imagined open-source, timely publications and diverse and engaging new ways of analyzing. Likewise, the scholars imagined a future in public administration that would allow for creative, yet relevant teaching that addressed the public-policy issues faced by society and embraced the link between research and practice. The scholars longed to feel that they were making a difference and to develop their own culture of academics. On completion of Phase I, Phase II began, bringing 220 participants from 13 countries, including the first round of scholars as presenters, all facing the challenge of bettering the field and ensuring that the problems faced by all levels of government are understood and confronted from a PA standpoint (O'Leary, 2010). Panel discussions in Phase II included such topics as the following: participatory policy making, the future of management, global public organizations, the effects of law, ethics, history and democratic knowledge, climate change, and the role of information technology (O'Leary, 2010). A series of essays written by the participants in response to the Minnowbrook III conference is examined in sections one through four of this analysis, and the ideas expressed in these essays are compared to the current PA curriculum in Indiana schools.

The *Journal of Public Administration Research and Theory's* symposium issue on the Minnowbrook III Emerging Scholars conference consists of a four-section publication summary of Minnowbrook III, each section focusing on a complicated and heavily discussed issue in public administration: research diversity, globalization of public administration, social equity, and leadership and management. Each section consists of essays developed by Minnowbrook III Phase I attendees. The essays are opinions of the authors and not necessarily a reflection of the view of all conference attendees. The essays in these sections were examined and compared to current Indiana PA programs on a broad spectrum to determine whether and how current Indiana programs compare to the needs expressed during Minnowbrook III by the PA scholars. Because the PA scholars have an in-depth and hands-on approach to public administration, their desires and opinions on the program and its future should be considered by current Indiana PA programs to assist in the development and improvement of the present programs.

C. THE DARK TIMES

Section one focuses on intellectual diversity and a foreshadowing of the future of public administration. In the article “Wrestling with Intellectual Diversity in Public Administration: Avoiding Disconnection and Fragmentation While Seeking Rigor, Depth and Relevance,” the authors refer to the field of public administration as characterized by diversity (Nesbit et al., 2010). The authors emphasize that most PA fields originated from political science, which continues to be the most cited discipline in public administration (Nesbit et al., 2010). An examination of Indiana colleges and universities with baccalaureate-level PA programs proves this point. U.S. College Search cites 37 Indiana colleges and universities as having PA programs. Of these, 29 were examined that offer PA degrees at the baccalaureate level. However, most of these institutions do not have standalone PA programs but instead incorporate the PA discipline into political science programs (U.S. College Search, 2011). Because of this, many of the core curriculum courses focus on the political system as a whole. It is safe to assume that, because of the incorporation into political science programs, at least at the undergraduate level, the background of emerging professionals in the field is defined by students taught under a political science discipline. Thus, political science is and remains the emphasis in these programs, more so than public administration and its leadership.

The article “Public Administration in the Dark Times: Some Questions for the Future of the Field” asks whether public administration can govern effectively because of the “dark times” faced by the nation today (Nabatochi, Goerdel, & Pfeffer, 2010). The “dark times” are characterized by issues such as terrorism, war, climate change, and other problems facing the nation, all issues that must be governed by public administration and in which the authors feel that the field is failing. What is meant by terrorism was not defined. Therefore, topics listed in Chapter III such as terrorism; the federal role in HLS; before, during, after attack; the sociology of HLS; risk analysis; and emergency management could be included in this discussion about “dark times.” The authors define public administration in “dark times” as “characterized by numerous and growing catastrophic events in the social, political, environmental, and economic arenas” that threaten humanity (Nabatochi, Goerdel, & Pfeffer, 2010). The article focuses on the belief

that to most politicians, the next election cycle is the most important concern and the task of addressing public policy issues is given to PA agencies. As a result, the PA agencies also become tied up in the bureaucracy and are often criticized and must face the consequences of the failed political agendas (Nabatochi, Goerdel, & Pfeffer, 2010). An examination of the current Indiana curriculum reveals, as previously stated, that most PA courses are incorporated into political science programs. Thus, the broader focus is on political science areas. As a result, today's scholars are learning both sides of what is stressed by the authors—how to handle public policy as well as the role played by different aspects of the political system. Many of the programs do offer courses focusing on the “dark times” discussed by the authors. As an example, 28 percent of the public administration and/or political science institutions in Indiana offer specific courses on terrorism, a very hot topic in PA and political science, as well as homeland security. At least one Indiana institution also offered courses on the community role and sociology of politics. Although Indiana institutions do focus on the “dark times” issues at some level, it is important to note that these issues are not part of mandated core curriculum in every institution. Thus, the authors have a valid point when stating, “We recognize that public administration is on the forefront of addressing many of the dark issues we have identified here; nevertheless, we believe the field faces serious challenges to its ability to do so effectively” (Nabatochi, Goerdel, & Pfeffer, 2010).

The Minnowbrook III attendees responsible for the article stress that, although the issues of “dark times” are being addressed by programs at some level, a great deal of work is still needed. A look at the Indiana institutions brings this point home because, although many of the “dark times” issues are explained in the courses offered, the focus is directed to the political system as a whole; courses on the “dark times” are few and far between and not core mandated courses at all institutions.

D. CONCLUSION

When examining the opinions of the essay authors present at Minnowbrook III and the general ideas behind the Minnowbrook conference tradition, it is important to note that the Minnowbrook tradition of gathering a group of PA scholars to critique the

field and to offer their views on the future of the field lives on in Minnowbrook III. Because of the differences in the time periods between Minnowbrook I and Minnowbrook III, the topics and the issues discussed differ, but the idea and the challenges behind the Minnowbrook theory remain the same.

During Minnowbrook I, the nation was divided due to controversial issues such as the Vietnam War and the still-developing equality of minorities in the public spectrum; thus, social equity and domestic issues were important points during Minnowbrook I. Forty years later, Minnowbrook III comes at a time when the issues being dealt with by the nation are felt more internationally. After September 11, 2001, topics such as terrorism focus on a global perspective and the importance of expanding the field of public administration to include not only domestic issues but a consideration of the international impacts as well. Minnowbrook III stands behind the idea that global perspective, diversity in research, and leadership and management are areas in great need of improvement, based on today's problems and those of the future.

At Minnowbrook III, the PA educators attempted to outline the future of the PA field at a very broad conceptual level. This leaves room for interpretation and flexibility. When the subject of "dark times" was discussed, it included the topic of terrorism. Terrorism has been a homeland security issue since the 9/11 attacks. In Chapter III, the topics that homeland security professionals and homeland security students deemed important in the field homeland security were discussed. The topic of terrorism was ranked high on the list, but topics such as the federal role in HLS; before, during, after attack; the sociology of HLS; risk analysis; and emergency management could also be included in the terrorism topic since those later topics could be focused around a terrorist event.

Minnowbrook III develops the idea that public administration has a role in confronting terrorism. Now the larger PA field needs to set the course and define how to best address this issue. By looking at the steps taken in the homeland security field to identify important topics and by including those most important topics into current PA programs at some consistent level, the idea of "dark times" was discussed at Minnowbrook III could be addressed.

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V. RECOMMENDATION FOR PUBLIC ADMINISTRATION PROGRAMS

A. INTRODUCTION

This chapter will examine the different policy options that Indiana PA institutions have in regard to incorporating homeland security education into their current curriculum. Three policy options will be examined: 1) do nothing; 2) develop a homeland security area of concentration within the PA program; or 3) develop mandatory and elective courses in homeland security. Each policy will be evaluated against three criteria: 1) effectiveness, which includes evaluating the number of students impacted; 2) implementation, which includes evaluating the impact on the university; and 3) measurement, which includes addressing whether the impact on students' future employment can be accurately measured.

These policy options were developed by looking at the way in which current programs are structured. The "do nothing" option says that changes are not needed or at least not recognized as necessary at this time. To help explain options two and three, I will use the present program structure of Indiana University.

In the School of Public and Environmental Affairs (SPEA), there are four different bachelor's programs. The program that was used for this thesis is the bachelor of science in public affairs. Within that degree program, there are six majors or areas of concentration:

1. Environmental management;
2. Legal studies;
3. Management;
4. Policy studies;
5. Public financial management;
6. Public and nonprofit management.

Within each program the available courses fall into one of the following areas: general education, electives, public affairs core, and major area. Some courses are mandatory and some are not.

Policy two recommends the development of a major or area of concentration that focuses on the homeland security field. This allows the program to determine the courses that must be completed. For example, the management major requires that five courses be completed by all students in that major (Indiana University–Bloomington, 2011).

Policy three outlines the development of courses that must be completed, but it does not establish a major. At Indiana University, all SPEA majors are required to take five core courses: environment and people; introduction to environmental science; national and international policy; urban problems and solutions; government finances and budget; and law and public policy (Indiana University–Bloomington, 2011). Then, within each major there are electives that students may take (Indiana University–Bloomington, 2011).

B. ANALYSIS OF POLICY OPTIONS

1. Policy One: Do Nothing

There is always an option to do nothing. This would indicate that the institutions within Indiana feel that they are providing the best education possible in order to prepare their students to enter into the work force. As was pointed out in the Minnowbrook study, public administration needs to focus on what is referred to as “dark times” issues. While some Indiana institutions have courses in these areas, those courses are not required and therefore not emphasized so as to ensure that all students understand or are prepared to deal with these issues.

a. *Criteria One: Effectiveness—Number of Students Impacted*

If this option is chosen, one can infer that these institutions feel that they are providing their students with the appropriate education for the current environment and that no changes are needed. No students would be impacted if the institution decides to do nothing or to stay the current course. Criteria one would be rated as LOW.

b. *Criteria Two: Implementation—Impact on the University*

If the institution does nothing, then there is no implementation impact on the university. However, doing nothing could result in a negative impact on the institution if other institutions make changes and the resulting changes are proven to help students to be better prepared. The do-nothing institution could thereby lose students to the other institutions. Criteria two would be rated as LOW.

c. *Criteria Three: Measurement—Accurate Measurement of Impact on the Future of Students*

If nothing different is done, then a measure could be developed to survey students in order to evaluate the jobs they were able to obtain and to assess whether any additional education would have been helpful. Collecting employment records can be done if students have already found employment before graduation. Alumni organizations could help to collect simple information, such as current employment. Obtaining more detailed information, however, such as the effectiveness of the courses and other necessary courses could be much harder to accomplish. Criteria three would be rated as LOW.

d. Course Recommendations

With the option to do nothing, there are no course recommendations.

2. Policy Two: Develop a Homeland Security Area of Concentration Within the PA program

Institutions typically develop majors or areas of concentration within their programs, as described above. These are usually areas recognized as important in that field. Examples in the field of business include management, finance, or marketing. This allows a student to specialize in what he or she finds interesting or feels will provide them with the best education for their career goals.

a. Criteria One: Effectiveness—Number of Students Impacted

If this option is chosen, only those students that select this area of concentration will receive homeland security education. There is no way to predict the number or percentage who would choose this option; thus the impact would be higher than the “do nothing” option, but it will be limited at this point. These courses could also be open to any PA student as electives, as long as the concentration students have the first option to fill their course needs for their concentration requirements. Criteria one would be rated as MEDIUM.

b. Criteria Two: Implementation—Impact on the University

Implementation would vary slightly from institution to institution, based on a few factors. First, what is the number of courses that would be needed to create a concentration? If six courses were required, then the institution would need to find qualified instructors in those areas. The institution may have teachers who teach similar courses and who could be utilized. Four institutions in Indiana have some form of homeland security program in existence; using those instructors would also minimize the impact. If this option is chosen, implementation could be done by requiring these six core classes to be taken in the student’s junior and senior years. Other PA students could

enroll in these six classes as electives, if the class size permitted. Freshmen and sophomores would be able to declare that they intend to pursue this concentration, giving the institution time to set class sizes and to add classes to the schedule. Criteria two is ranked as MEDIUM.

c. Criteria Three: Measurement—Accurate Measurement of Impact on the Future of Students

Given the limited number of students who will take this program, it would not be difficult for the institution to follow the progress of these students after graduation. Since the program is new, the institution could ask these students to assist the university in studying the impact of the program by sending out surveys for the first 12 to 24 months after graduation, asking the student's status, whether the concentration was helpful, and what can be done to improve the program. The fact that these students chose this concentration might make them willing to participate. Criteria three is ranked as MEDIUM.

d. Course Recommendations

The survey of homeland security professionals, emergency managers, and homeland security students, along with the Minnowbrook study, should provide guidance for course selection. This too may vary from institution to institution, but survey results of all the above groups show that more than 80 percent of those surveyed believe the following topics to be important or very important: state and local government; terrorism; before, during, and after attack; interagency coordination; legal, ethical, civil rights; and emergency management. The Minnowbrook study empathizes "dark times," which would include terrorism; before, during, and after attacks; and emergency management. These six courses should provide a good baseline understanding of homeland security. Several of these topics can also be linked to the Quadrennial Report and the Indiana strategy for Homeland Security. Mission one in the QHSR has a primary focus on terrorism. Goal two of the Indiana strategy describes the need for planning in the case of both natural and man-made disasters, such as terrorism. Both the QHSR and the Indiana strategy have

goals that deal with preparedness, response and recovery, or before, during, and after the attack. Additionally, both federal and state documents emphasize the importance of interagency coordination among different levels of government.

3. Policy Three: Develop Mandatory and Elective Courses in Homeland Security

a. Criteria One: Effectiveness—Number of Students Impacted

This option would require institutions to develop one or two mandatory homeland security courses for all public administration students. It would also require institutions to develop additional elective courses for PA students. This would result in all PA students having some homeland security education, but with a limit of one or two courses, it would be difficult to determine which courses or topics to offer. Criteria one is rated as HIGH.

b. Criteria Two: Implementation—Impact on the University

With one or two mandatory classes and additional elective classes, implementation of this option will be more difficult. The one or two mandatory classes will be easy to implement: finding instructors and setting a class schedule would not be difficult since all PA students must take these courses. Choosing which two courses to offer will not be easy, however, as will be discussed in the course recommendation section. The electives option will be more difficult. The difficulty of determining which classes to offer and estimating the number of students who might enroll in a single elective will make it very difficult to schedule for issues such as room size. If no students sign up for a certain elective, then the institution's time and efforts and those of the instructor, are wasted. Criteria two is ranked as HIGH.

c. Criteria Three: Measurement—Accurate Measurement of Impact on the Future of Students

The measure of this option will be more difficult than that of option two. Since all PA students are required to take some homeland security courses, obtaining helpful survey data from the students once they leave the institution would be more difficult. Surveying students before they leave to obtain information about job status can be done. However, tracking graduates to see whether the courses taken had any effect on their ability to function in the professional world might be difficult due to the sheer numbers involved. Criteria three is ranked as LOW.

d. Course Recommendations

As stated in policy two in the survey of professionals and students, six topic areas rose to the top. For this policy, if two mandatory classes were to be taken, which two should be selected? The survey ranks the topic of state and local government first with 94 percent, followed by terrorism; before, during, and after attack; interagency coordination, all of which were ranked at 87 percent. Eight (28 percent) Indiana institutions already have a terrorism course, making that the easiest solution at this time. The remaining subjects of before, during, and after an attack; interagency coordination; legal, ethical, civil rights; and emergency management should be developed as electives, giving students the option to develop a very broad and extensive education in homeland security.

C. RECOMMENDATIONS AND CONCLUSION

According to the policy options set out in Figure 5, the development of a homeland security concentration is the best option to change the curriculum within Indiana higher education institutions to reflect the complex homeland security issues faced in the future. The development of a homeland security concentration has a medium impact on the number of students that it will affect, which also translates to having a

medium impact on the institution. This impact on the institution is important. If the impact to the institution is too high, as in option three, mandatory and elective homeland security courses, then the institution may choose option one, which is to do nothing.

	EFFECTIVENESS	IMPLEMENTATION	MEASURE
DO NOTHING	LOW	LOW	LOW
HOMELAND SECURITY CONCENTRATION	MEDIUM	MEDIUM	MEDIUM
MANDATORY & ELECTIVE HOMELAND SECURITY	HIGH	HIGH	LOW

Figure 5. Policy Options Chart

The homeland security concentration also has a medium rating in measurement. The institution needs a valid way to measure the effects of any change that is taken. By limiting the number of students impacted, there is a greater chance that the effects of this change can be followed. This measure can help determine the direction that these institutions take in the future. If the measures are good, then the institution may choose to broaden its homeland security courses; conversely, if the measures are bad, the institution can take steps to improve the situation.

The development of a homeland security concentration will provide those students who desire a focus in homeland security with the most comprehensive education in that area, while keeping the impact on the institution to a minimum. This should be the first step to an ever-expanding exposure to homeland security on the part of colleges and universities.

VI. WHAT IS NEXT?

A. INTRODUCTION

The development of a homeland security major or area of concentration within public administration programs has been shown to be the most effective option with limiting impact, making it the most desirable choice. Once this system is in place in Indiana, then institutions outside Indiana can quickly duplicate the application. Based upon the examination of how homeland security education can be used to enhance current PA programs, a discussion of what else can be and needs to be done should be completed.

B. THE WORK TO BE DONE

An important question is how to ensure that progress made can be sustained and even improved. By taking steps to evaluate what is already done and by being committed to keeping the process moving forward, homeland security can become a pillar in the PA world. To accomplish this, the completed steps must be evaluated and adjustments to the process must continue to be made. The PA graduates of the future will be key to this evaluation. They are the ones who will use this education in real-world applications to help guide our public offices.

Gaining the long-term support of these PA professionals can provide the needed information for PA educators to make the appropriate adjustments to PA programs. These professionals will determine firsthand what skills and knowledge are needed to perform their day-to-day tasks, which will include homeland security. These professionals will also be able to evaluate how the homeland security education they received has prepared them for the tasks they perform daily. They will also be able to advise educators regarding what homeland security education was missing, and what homeland security topics are most important for today.

The need to expand the process used in this thesis to other fields of study should not be overlooked. Beyond public administration, other fields of study such as business management could benefit from the incorporation of homeland security topics into their curriculum. The critical infrastructure and key resources of this country are owned by the private and public sector.

Education of the private sector will provide value to securing the critical infrastructure and key resources owned by the private sector. The DHS Quadrennial Report, in its “Mission of Preventing Terrorism and Enhancing Security, Goal 1.3,” goes into detail about the need to “understand and prioritize risk to critical infrastructure,” “protect critical infrastructure,” and “make critical infrastructure resilient” (DHS, 2010a). To be successful in this mission, the education of these business professionals, just like the PA professionals, will need a baseline education in homeland security.

I would further propose that a more drastic step be taken. Missions one and five in the Homeland Security Quadrennial Report contain goals that involve families or communities (DHS, 2010a). To add to our country’s overall ability to deal with homeland security issues, we should strive to educate as many of our citizens as possible. For that reason, I would suggest that several of the homeland security topics be added to the general education requirements of institutions. Topics such as terrorism; interagency coordination; and before, during, and after an attack will give many of our citizens and the educated public a view of what the threat is, what is being done, and what needs to be done. It will also give them an understanding of what they can do in times of crisis.

APPENDIX A. INDIANA INSTITUTIONS AND CORRESPONDING RELEVANT CURRICULUM

College/University	Course Title
Anderson University	POSC 2120 <i>State and Local Government</i> POSC 3400 <i>Comparative Politics</i>
Ball State University	POLS 237 <i>State and Local Politics</i> POLS 280 <i>Comparative Political Systems</i> POLS 375 <i>Media and Politics</i> POLS 435 <i>Intergovernmental Relations</i> POLS 494 <i>Politics of Terrorism</i>
Butler University	PO151 <i>Introduction to Comparative Politics</i> PO220 <i>Community Mediation</i> PO332 <i>State and Local Government and Politics</i>
DePauw University	POLS 150 <i>Comparative Politics and Government</i> POLS 170 <i>International Politics</i> POLS 226 <i>State and Local Government</i> POLS 240 <i>Contemporary Political Ideologies</i> POLS 382 <i>Global Issues</i>
Earlham College	POLS 105 <i>Introduction to Comparative Politics</i>
Grace College & Theological Seminary	POS 301 <i>State and Local Government</i>
Hanover College	PLS 315 <i>Political Sociology</i> PLS 118 <i>Comparative Politics</i>
Indiana State University	PSCI 305 <i>State and Local Government</i> PSCI 280 <i>Introduction to Comparative Politics</i> PSCI 330 <i>Introduction to Public Administration</i>
Indiana University–Bloomington	Y107 10521 <i>Introduction to Comparative Politics</i> Y557 16117 <i>Comparative Politics: Approaches/Issues</i> Y375 10531 <i>War and International Conflict</i> Y490 16116 <i>Social Movements and Health Activism</i>
Indiana University–East	POLS-Y 107 <i>Introduction to Comparative Politics</i> POLS-Y 307 <i>Indiana State Government/Politics</i> POLS-Y 346 <i>Comparative Politics in Developing Countries</i>
Indiana University–Northwest	Y107 <i>Introduction to Comparative Politics</i> Y371 <i>Workshop in International Topics: Terrorism and Political Violence</i>

College/University	Course Title
Indiana/Purdue University–Fort Wayne	POLS-Y107-01 <i>Introduction to Comparative Politics</i> POLS-Y200-04 <i>Comparative Political Behavior</i> POLS-Y200-06 <i>Terrorism and Tyranny</i> POLS-Y103-03 <i>American Politics</i>
Indiana/Purdue University–Indianapolis	Y217 <i>Introduction to Comparative Politics</i> Y307 <i>Indiana State Government and Politics</i> Y321 <i>The Media and Politics</i> Y373 <i>The Politics of Terrorism</i>
Indiana University–South Bend	POLS-Y 107 <i>Introduction to Comparative Politics</i> POLS-Y 371 <i>Terrorism and Political Violence</i>
Indiana University–Southeast	Y107 <i>Introduction to Comparative Politics</i> Y307 <i>Indiana State Government and Politics</i> Y349 <i>Comparative Public Policy</i> Y402 <i>Politics of the Budgetary Process</i> Y404 <i>Political Issues in Public Personnel Management</i>
Manchester College	POSC 122 <i>State and Local Politics</i> POSC 236 <i>Comparative Foreign Policy</i>
Purdue University–Calumet Campus	POLS 370 <i>Comparative State Government and Politics</i> POLS 371 <i>Comparative Urban Politics</i>
Purdue University–Main Campus	POLS 102 <i>Comparative Politics</i>
Saint Joseph’s College	POLS 102 <i>Comparative Politics</i>
Saint Mary’s College	POSC 207 <i>Comparative Politics</i>
Taylor University–Fort Wayne	POS 222 <i>Comparative Politics</i>
Taylor University–Upland	POS 222 <i>Comparative Politics</i>
University of Evansville	PSCI 320 <i>Comparative Politics Seminar</i> PSCI 343 <i>Politics and the Media</i> PSCI 349 <i>State and Local Government</i> PSCI 435 <i>Human Rights Seminar</i>
University of Indianapolis	PSCI 105 <i>State and Local Government</i> IREL 335 <i>Comparative Politics</i> IREL 354 <i>Terrorism: Past, Present and Future</i>
University of Notre Dame	POLS 10400 01 <i>Comparative Politics</i> POLS 30656 01 <i>Human Rights and Human Wrongs</i>
University of Saint Francis	POLI 301 <i>State and Local Government</i> POLI 305 <i>Comparative Politics and Legal Systems</i> POLI 312 <i>Civil Rights and Civil Liberties</i>

College/University	Course Title
University of Southern Indiana	POLS 202 <i>Introduction to Public Administration</i> POLS 281 <i>Comparative Politics</i> POLS 305 <i>State and Local Government</i>
Valparaiso University	POLS 130 <i>Comparative Politics</i> POLS 220 <i>State and Local Politics in the U.S.</i>
Wabash College	PSC 122 <i>Survey of Comparative Politics</i> PSC 317 <i>State and Local Politics</i> PSC 374 <i>Militaries as Political Actors</i>

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APPENDIX B. INDIANA HLS CURRICULUM BY INSTITUTION

Indiana College/University	Courses Offered for HLS Degree
Indiana University–Indianapolis	<ul style="list-style-type: none"> • SPEA-J550 <i>Homeland Security</i> • SPEA-J524 <i>Crisis Management for Public Safety</i> • SPEA-J528 <i>Risk Analysis for Public Safety</i> <p>Elective Courses:</p> <ul style="list-style-type: none"> • SPHA-H501 <i>US Health Care Systems, Policies, and Ethical Challenges</i> • SPHA-H515 <i>Health Administration and the Role of Public Health in Epidemics</i> • SPEA-J520 <i>Mapping and Analysis for Public Safety</i> • SPEAJ-J682 <i>Planning and Management for Criminal Justice and Public Safety</i> • SPEA-V540 <i>Law and Public Affairs</i> • SPEA-V581 <i>Public Safety Law</i> • SPEA-V654 <i>Public Program Management and Contracting</i>
Indiana University–Kokomo	<ul style="list-style-type: none"> • SPEA-J278 <i>Principles and Practices in Homeland Security</i> • SPEA-J387 <i>Foundations of Homeland Security</i> • SPEA-V272 <i>Terrorism and Public Policy</i> • SPEA-V275 <i>Introduction to Emergency Management</i> • SPEA-V387 <i>Public Administration and Emergency Management</i>
Purdue University–Main	<ul style="list-style-type: none"> • ASM591A/OLS581A <i>Foundations in Homeland Security</i> • ASM591B/OLS581B <i>Managing Resources and Applications for Homeland Security</i> <p>Elective Courses selected from any area of research including engineering, agriculture, nursing, science, technology, and liberal arts related to HLS.</p>

Indiana College/University	Courses Offered for HLS Degree
Vincennes University	<ul style="list-style-type: none"> • <i>Continuity of Operations</i> • <i>Public Policy for Homeland Security and Public Safety</i> • <i>Homeland Security</i> • <i>National Security Law</i> • <i>Introduction to Terrorism</i> • <i>Cultural Diversity</i> • <i>Statistics</i> • <i>Homeland Security and Public Safety Seminar</i> • <i>Weapons of Mass Destruction</i> • <i>Research Methods</i> • <i>Contemporary Ethical Issues</i> • <i>Crisis and Disaster Issues in Homeland Security and Public Safety</i> • <i>Supervision/Management</i> • <i>Social Deviance</i>

APPENDIX C. TOPICS BY CATEGORY FOR INDIANA INSTITUTIONS

Topic	AU	BSU	BU	DeU	EaC	GCTS
Before, during, after attack						
Civil/military relationship						
Civil rights/legal/ethics						
Comparative government	x	x	x	x	x	
Cybersecurity						
Decision making						
Dept. of Homeland Security						
Emergency management						
Engineering and HLS						
Exercise, training, and modeling						
Federal role in HLS						
Geospatial						
Homeland security						
Human resources						
Intelligence and HLS						
Interagency coordination		x				
Leadership						
Media, risk communication, & HLS		x				
Private sector in HLS						
Psychology of HLS						
Public health						
Risk analysis						
Role of communities			x			
Role of the individual in HLS						
Sociology (politics)				x		
State and local role in HLS	x	x	x	x		x
Strategic plan/budget						
Technology for HLS						
Terrorism		x		x		
Transportation and HLS						

Topic	HU	ISU	IUB	IUE	IUNW	IUPUIFW
Before, during, after attack						
Civil/military relationship						
Civil rights/legal/ethics						
Comparative government	x	x	x	x	x	x
Cybersecurity						
Decision making						
Dept. of Homeland Security						
Emergency management						
Engineering and HLS						
Exercise, training, and modeling						
Federal role in HLS						
Geospatial						
Homeland security						
Human resources						
Intelligence and HLS						
Interagency coordination						
Leadership						
Media, risk communication, & HLS						
Private sector in HLS						
Psychology of HLS						
Public health						
Risk analysis						
Role of communities						
Role of the individual in HLS						
Sociology (politics)	x		x			
State and local role in HLS		x		x		x
Strategic plan/budget		x				
Technology for HLS						
Terrorism			x		x	x
Transportation and HLS						

Topic	IUPUI	IU-SB	IU-SE	MC	PU-C	PU
Before, during, after attack						
Civil/military relationship						
Civil rights/legal/ethics						
Comparative government	x	x	x	x	x	x
Cybersecurity						
Decision making						
Dept. of Homeland Security						
Emergency management						
Engineering and HLS						
Exercise, training, and modeling						
Federal role in HLS						
Geospatial						
Homeland security						
Human resources						
Intelligence and HLS						
Interagency coordination						
Leadership						
Media, risk communication, & HLS	x					
Private sector in HLS						
Psychology of HLS						
Public health						
Risk analysis						
Role of communities						
Role of the individual in HLS						
Sociology (politics)						
State and local role in HLS	x		x	x		
Strategic plan/budget			x			
Technology for HLS						
Terrorism	x	x				
Transportation and HLS						

Topic	SJC	SMC	TU-FW	TU	UE	UI
Before, during, after attack						
Civil/military relationship						
Civil rights/legal/ethics					x	
Comparative government	x	x	x	x	x	x
Cybersecurity						
Decision making						
Dept. of Homeland Security						
Emergency management						
Engineering and HLS						
Exercise, training, and modeling						
Federal role in HLS						
Geospatial						
Homeland security						
Human resources						
Intelligence and HLS						
Interagency coordination						
Leadership						
Media, risk communication, & HLS					x	
Private sector in HLS						
Psychology of HLS						
Public health						
Risk analysis						
Role of communities						
Role of the individual in HLS						
Sociology (politics)						
State and local role in HLS					x	x
Strategic plan/budget						
Technology for HLS						
Terrorism						x
Transportation and HLS						

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